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AGRICULTURE, FISHERIES AND FOOD

Report of the Committee
appointed to consider
Agriculture and
Dairy Diploma Courses
in Wales

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Constitution of the Committee

*PROFESSOR D. SEABORNE DAVIES, M.A., LL.B. (*Chairman*)
Pro-Vice-Chancellor and Professor of Law, the University of Liverpool

MR. T. GLYN DAVIES, M.A.
Director of Education for Montgomeryshire

MR. J. G. DONALDSON, O.B.E., B.A.
Gloucestershire farmer and Member of the Advisory Committee of the Provincial
Agricultural Economics Service

PROFESSOR W. CHARLES EVANS, M.Sc., Ph.D., F.R.I.C.
Professor of Agricultural Chemistry at the University College of North Wales,
Bangor

SIR OFFLEY WAKEMAN, BT., D.L., J.P., M.A.
Chairman of the Education Committee of the Shropshire County Council

MR. J. B. FOXLEE (*Secretary*)

*Professor Seaborne Davies succeeded Sir James Mountford, D.Litt., D.C.L., LL.D. (Vice-Chancellor, the University of Liverpool) who relinquished the chairmanship of the Committee on medical advice at the outset of the enquiry.

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List of abbreviations

G.C.E.	General Certificate of Education
L.E.A.	Local Education Authority
M.A.F.F.	Ministry of Agriculture, Fisheries and Food
N.A.A.S.	National Agricultural Advisory Service
N.D.A.	National Diploma in Agriculture
N.D.D.	National Diploma in Dairying
N.F.U.	National Farmers' Union
U.C.N.W.	University College of North Wales, Bangor
U.C.W.	University College of Wales, Aberystwyth
U.G.C.	University Grants Committee
W.J.E.C.	Welsh Joint Education Committee

*Report of the Committee appointed to consider
Agriculture and Dairy Diploma Courses in Wales*

To the Rt. Hon. D. Heathcoat Amory, M.P.

Sir,

In December, 1955, you appointed us:

"to consider and advise on the suitability of approving two-year diploma courses at farm institutes in Wales, with particular reference to the applications made by the Local Education Authorities for Monmouthshire and Carmarthenshire."

In our introductory discussions with your representatives, we took steps to establish the precise scope of these Terms of Reference. We were advised not to regard them as exclusively restricted to diploma training at farm institutes and that, by necessary implication, they did not preclude us from considering alternatives. We have met ten times, and now submit our report.

CHAPTER I

Introduction

Pre-war diploma courses in Wales

1. Up to the outbreak of World War II diploma training in Wales was provided by the University College of Wales, Aberystwyth, (U.C.W.) in agriculture and dairying, and by the University College of North Wales, Bangor, (U.C.N.W.) in agriculture only, though an occasional student took a diploma course in estate management.

2. These courses were well supported. Between 1930 and 1939 220 students were admitted, 111 for agriculture courses and 109 for dairy courses. 176 of them attended at Aberystwyth and 44 at Bangor.

Post-war policy for diploma training

3. New policies for agricultural education emerged during and after World War II. They were based on the reports of the Committee on Post-war Agricultural Education in England and Wales, 1943 ("The Luxmoore Report," Cmd. 6433), the Committee on Higher Agricultural Education in England and Wales, 1946 ("The Loveday Report," Cmd. 6728) and the interim report of the Joint Advisory Committee on Agricultural and Horticultural Institutes, 1947 (also under the chairmanship of Dr. Loveday).

4. The basis of present policy is that full-time agricultural education should be given at the three *mutually exclusive* levels of universities for three-year or four-year degree courses, agricultural colleges for two-year courses leading to the college diploma and one or other of the national diplomas, and farm institutes for one-year courses generally leading to an institute certificate.

5. Underlying this policy of segregating the three levels is the view, which was more or less common ground between the Luxmoore Committee and both of the Loveday Committees, that the pre-war practice of mixing courses (e.g., initial diploma as well as degree teaching at universities, degree as well as diploma teaching at colleges, diploma and even degree courses as well as certificate courses at farm institutes) was undesirable and that each type of establishment should confine itself, as far as possible, to one level of instruction. On educational grounds it was reasoned that failure to keep these levels separate would lead to confusion of purpose in teaching and to staffing difficulties. There would be a danger of teaching for courses at a higher level than was justified by the facilities. In the case of universities, as we have been reminded, it could also prejudice the attention given to research.

6. Whatever the general merits of this policy, and they have not passed unquestioned, it has not been given universal application. Thus in England the Essex and Lancashire Farm Institutes have been permitted to provide two-year diploma courses as well as the basic one-year course, and the University of Nottingham still provides diploma teaching in dairying.

7. In Wales there is no agricultural college at all and that, in our view, is the main reason for our enquiry.

Application of post-war policy to Wales

8. Unless and until there is an agricultural college in the Principality, diploma

training for Welsh students can only be provided either:

- (a) by diploma centres in England; or
- (b) by one or more of the university colleges undertaking diploma training in addition to their responsibilities for degree teaching and research; or
- (c) by one or more of the Welsh farm institutes teaching for diploma as well as for their one-year certificate.

9. Each of these alternatives presented itself in our enquiry. Thus we found there had been no agriculture diploma course in Wales since 1939, neither UNIVERSITY COLLEGE having revived its agriculture course following the policy mentioned in paragraph 4 above, and that Welsh students have had to seek places at establishments in England. We found that dairy diploma students have been more fortunate because U.C.W. has continued to provide a course leading to the National Diploma in Dairying (N.D.D.), although its present undertaking to do so does not extend beyond 1959—the last day of entry being Michaelmas 1957. To meet these existing and expected gaps in agriculture and dairy courses respectively, we were asked to consider applications from certain Local Authorities in Wales to establish diploma courses at their farm institutes.

10. The first significant development came in 1952 when U.C.W. indicated its intention to discontinue dairy diploma teaching. As a result, the Carmarthenshire Education Authority came forward with a proposal to provide courses leading to the N.D.D. at its Gelli Aur Farm Institute. This proposal was remitted to the Joint Advisory Committee on Agricultural Education which has since been disbanded in accordance with the recommendations of Lord Carrington's Working Party on Agricultural Education.

11. The Joint Advisory Committee recommended that U.C.W. should be pressed to continue temporarily the N.D.D. course at Aberystwyth, and that a one-year supplementary course in dairy husbandry should be established at Gelli Aur so that suitable students who completed their ordinary one-year course could spend a further year specializing in dairy husbandry. The Ministry of Agriculture accepted these recommendations and U.C.W. agreed to continue its course as a temporary measure. Being below degree level, the course could not be assisted from University Grants Committee funds, but with the agreement of the U.G.C. the Ministry itself made grants up to and including the academic year 1955–56; these were supplemented by small contributions from certain Welsh Local Education Authorities.

12. When, in 1954, there was again uncertainty whether U.C.W. would continue dairy diploma teaching, the Carmarthenshire Authority, with the full support of the Welsh Joint Education Committee (W.J.E.C.), revived its application to provide dairy diploma courses at Gelli Aur. Pending a decision on this application the Authority deferred further action on the supplementary course mentioned in paragraph 11 above.

13. In 1954 the Monmouthshire Education Authority applied to the Ministry for approval to establish a diploma course in agriculture at its Usk Farm Institute, and early in 1956 the Caernarvonshire Authority asked us to consider the case for a similar course at its Farm Institute at Glynllifon.

14. The remaining Welsh Authority maintaining a farm institute, the Denbighshire County Council, has not formally applied to establish a diploma course. During our informal discussions with its representatives, we learnt that the Denbighshire Authority hoped to introduce at the Llysfas Institute the second-year supplementary course, devoted specially to hill farming, recommended by the Loveday Committee. The Authority hoped that diploma courses would be established at a Welsh national centre, preferably associated with the University of Wales, failing which they urged us to ensure special provision for students to take a National Diploma in Agriculture (N.D.A.) course in North Wales.

General survey of the present position

15. The history of this problem over the past decade points to the two general conclusions which must preface the succeeding chapters in our report.

16. First, if the need exists for diploma courses in Wales, and if the established doctrine of exclusive "three-tier" teaching is accepted, then there is no alternative to the establishment of a college. Without a college, some departure from "orthodoxy" must be accepted.

17. Second, it is now apparent that makeshift arrangements will not provide a satisfactory solution. No doubt the Joint Advisory Committee had good reasons for the interim proposals it made to meet the conditions obtaining in 1952; within two years, however, the same problem reappeared, and the need for a further enquiry became manifest. We also appreciate that circumstances have more than once compelled the University to review its attitude towards diploma courses, but the effect has been to cause general unsettlement in Wales and to lead the Local Authorities to assume, with good reasons, that responsibility for continuing the courses might suddenly devolve upon them. From all this we have discerned a compelling need for a stable and long-term arrangement.

18. These two general conclusions have governed our approach to the problem. We have concluded that our enquiry must either lead to the establishment of a college in Wales or to a break with the "three-tier" policy for agricultural education; and we are clear that our own report will have little value unless it points to an acceptable and lasting solution. All this has prompted us to probe more deeply into the problem than might otherwise have been strictly necessary, and to cast our net widely so as to acquaint ourselves not only with the interior economy of universities, agricultural colleges and farm institutes but also with the views and wishes of all interests directly or indirectly concerned.

19. As a result, our enquiry has taken us to U.C.W., to the Harper Adams Agricultural College in Shropshire, to the Essex Institute of Agriculture at Writtle, and to every farm institute in Wales. During the same period we have examined written memoranda from not less than twenty-seven organisations and individuals, and we have had the benefit of discussions with as many as seventy-six witnesses. There are full details in Appendix A and we take this opportunity not only of recording our keen appreciation of the help thus given to us but also of drawing attention to the widespread interest which the subject matter of our enquiry has commanded within and without the Principality.

20. We express with the very greatest pleasure our sense of deep obligation to our secretary, Mr. J. B. Foxlee. He has been untiring in his attentions to the Committee and its work. With great assiduity and ability, he has prepared the material for our deliberations, organised our meetings and assisted us on all matters which required intimate and expert knowledge. To him, and to his co-adjutor, Mr. F. R. Stokes, we give our warmest thanks.

CHAPTER II

The demand for diploma courses

21. Before considering, under our Terms of Reference, whether diploma courses should be provided at certain Welsh farm institutes, we have thought it advisable to satisfy ourselves on the following matters:

- (a) that these courses are needed at all;

- (b) that they are needed in Wales and, if so, which courses should be provided;
- (c) that there is reasonable assurance that students would come forward in sufficient numbers to justify any provision made; and
- (d) that there are suitable openings for those who gain their diplomas.

This has proved the most difficult feature of our enquiry.

(I) GENERAL CONSIDERATIONS

The value of the diploma

22. Both the need for two-year courses and their character have been questioned. In 1946 the Loveday Committee was inclined to doubt their justification and their future. A far more favourable view, however, was taken by Sir Keith Murray's Committee which sat eight years later and reviewed the work of agricultural colleges. A few of our witnesses have been critical either of the existence or the content of diploma teaching.

23. We are not strictly concerned with this controversy but, in aiming at a long-term solution, we were bound to form some judgement on the issue. The Ministry of Agriculture, Fisheries and Food (M.A.F.F.) has accepted the report of the Murray Committee, whose views were formulated when the uncertainties of the war years and the reconstruction period had been largely dispelled, and when the future of agricultural education could be viewed on a more stable basis. The weight of our evidence reinforced these views and left us confident that the two-year course is likely to remain in the pattern of agricultural education.

24. Although we can see diploma training continuing well beyond the next decade, we carefully noted any doubts expressed to us about the actual content of the courses. It was suggested that the N.D.A. syllabus was obsolete in some respects and could benefit by increased emphasis on farm management and forestry (especially shelter belts), and that the N.D.D. course might, with advantage, be adjusted to include a modicum of technology that would render unnecessary the indifferently-supported course for the National Diploma in Dairy Technology.

25. Suggestions of this kind may appear far removed from our Terms of Reference but we have not been able to dismiss them entirely, especially where they have a bearing on *the needs of Wales*. This is the case primarily with agriculture courses where we have frequently been urged to cater for the special problems of farming in Wales. We shall revert to the matter in our analysis of the demand for agriculture diploma courses. Meantime, our general understanding is that although the colleges generally send forward many of their students for the national diplomas, each centre teaches primarily for its own diploma and can therefore impart any desired bias into its course. We also found a body of opinion generally content with the existing provisions and in any case we were assured that the National Examination Boards continually revise their syllabuses to keep abreast of developments and requirements in the industry.

Impact of pre-war short courses

26. An important influence in pre-war agricultural education in the Principality which has been constantly mentioned to us throughout our enquiry was the provision of "short courses" at U.C.W. These courses undoubtedly had a material bearing on the flow of Welsh students for diploma training.

27. These "short courses" were given in both agriculture and dairying. The dairy course was confined to one session of six weeks during which students were given elementary instruction in dairying bearing on farm dairy processes and the rudiments of dairy bacteriology. The agriculture course consisted of two sessions, each of about six weeks. According to his progress during the first session a student might be offered a place on the second or "continuation" session, and of those who completed both sessions the best were selected for the diploma course. ;

28. Over the decade 1930-39 over 250 students took the short or special courses in dairying, and some 160 took the corresponding short course in agriculture (over 100 of the latter returned for the second or "continuation" session). In this way these "short courses" contributed to the diploma intake and it was probably the selective build-up of students, especially on the agricultural side, that has commended the "short course" system to so many of our witnesses.

29. Praise and nostalgia for the "short course" system reverberated throughout our written and oral evidence. Time and again prominent witnesses have dwelt on their value to the student and the industry alike. Their disappearance from the Welsh agricultural scene has been deplored variously by those who taught the students, by those who took the courses, and—such has been their impact on Welsh agriculture—by young farmers whom we interviewed and who were only born in the last years of the courses.

30. With some misgivings we have had to acknowledge that, as a stimulus for further agricultural education in Wales, the "short courses" have no counterpart these days, although it is to be hoped that the day and block release systems and other forms of technical and further education may fulfil a similar purpose.

31. In retrospect, the supreme value of the "short courses" was that they provided selective pre-entry training which threw up those suitable for diploma courses, whetted their appetites, and fired their ambitions. At the same time the "short courses" had an important psychological effect on the Welsh attitude to diploma training, and we have felt justified in examining this matter in some detail.

Welsh attitude to diploma teaching

32. The "short courses" offered the kind of progression that was so characteristic of Welsh agricultural education—that of taking education in steps. They fitted naturally into the pre-war structure when there was no universal free secondary education and there were young men on the farms quite capable of undertaking work of a degree standard. The "short courses" helped to release this potential by enabling the student to go on from his "short course" to take his diploma or even to graduate. Now, with the passage of the Education Act of 1944, there is not the same necessity for "short courses" as a kind of "rung" in the ladder of agricultural education.

33. The difficulty is that this pre-war conception of "rungs" still persists quite substantially in the Welsh attitude to agricultural education. Frequently our evidence has described the diploma course as a "rung"—the next step, in fact, for the brighter student from the farm institute or a springboard from which the first-class student can take his university degree. In our view, progression of that kind in present-day agricultural education is more likely to be the exception than the rule. We share the view taken by the Murray Committee that the diploma student should normally, though not invariably, be a "direct entrant," and that the choice between education at the farm institute, the diploma centre or the university should generally be determined at the outset by the educational standard of the student and the career he has in mind.

34. There is no difficulty in applying standards of entry and choice of career to university courses. The university degree course is the natural grounding for the would-be teacher, research officer, or agricultural adviser. Similarly, the college diploma course is primarily for those aiming at managerial responsibility, whether on family farms, large estates or overseas, or seeking appointments with commercial firms.

35. The scope of the county institute course is less definite. It has been defined as providing "a basic training for students aiming at work of special responsibility in agriculture or in horticulture, whether as farmers or growers on their own

account, or in supervisory or specialist paid employment."* In England the farm institute tends to provide the training for the first-class farm foreman, stockman or other specialist workers whose services are much in demand on estates and larger farms. Wales, by comparison, is predominantly a nation of small family farms where the farmer's son must often be a combination of farmer, manager, foreman, and worker; this seems to us to present Welsh farm institutes with a special problem, with an exceptional span of training to impart, and with a remarkable range of educational standards among the students. Some of the latter, either on applying for, or on completion of, their one-year course, undoubtedly regard the institute training as an educational "rung."

36. If anything, therefore, the Welsh institute is catering primarily for the son of the family farmer where the corresponding establishment in England may be catering largely for those who with further experience may become specialist workers in paid employment. In this way the inherent character of small family holdings in the Principality often finds Welsh farm institutes admitting those who would take a college course in England—indeed, the better educated entrants regard the college course as the next "rung." In our view, this contributes a good deal to some of the deep-rooted problems now besetting Welsh farm institutes, and we are sympathetic to the view, expressed particularly by the County Councils' Association, that the function of farm institutes generally is a matter for urgent review and that some confusion of purpose is apparent at the present time. We are glad to learn that the Minister of Agriculture is shortly to appoint a committee to enquire into the whole question of agricultural education at the farm institute level.

37. By admitting students above the appropriate level, e.g., those who regard the one-year course as a "rung," farm institutes may find themselves compelled to condition their courses to match the standards of those they admit, with the result that some students may be frustrated and that others may be out of their depth. To meet criticisms of this kind we were informed by one Welsh institute that they had actually divided the students into two levels.

38. This situation may itself point to the disadvantages of depriving Wales of diploma courses. On our visits to the Welsh institutes we were surprised to learn how many students were reported to be of diploma potential, and we suspect that many of them would have taken the two-year course if there had been a centre in the Principality. As it is they apply for the local institute course where their presence may tend to confuse educational standards and purposes. It may also tend to engender, among the teaching staffs, an understandable desire to instruct at a higher level than is appropriate to a farm institute.

Vacancies at Welsh farm institutes

39. We could not avoid investigating the present difficulties confronting Welsh farm institutes. Here again the problem, and its solution, is outside our Terms of Reference, but we have had to consider whether similar difficulties, notably with the recruitment of students, are likely to be reproduced if diploma courses were established. More particularly we have had to ascertain whether, and if so how far, the present difficulties reflect shortcomings in Welsh institutes and especially those which have applied to establish two-year courses.

40. The overriding problem is that 97 (or 36 per cent) of the 271 student places are empty. We have heard many explanations and are bound to analyse the more likely causes to see how far they could affect the success of diploma courses and the supply of diploma students.

*M.A.F.F. publication—"Full-time Agricultural Education in England and Wales." (AE.56/57)

41. First, we ought to make it clear that the number of students attending Welsh farm institutes has increased compared with the number before the war. In 1939 it was 131 and in 1956 it is 174. Today there are empty places not because of a decline in student numbers but because Wales has not yet fully responded to the increased provision made since the war. Compared with 1939 there is now an additional institute (Celyn, Flintshire, for horticultural students) while two of the pre-war establishments (Madryn and Pibwrlwyd) have been enlarged and re-sited at Glynllifon and Gelli Aur respectively.

42. In this way the number of places at Welsh institutes has been more than doubled since the war but extra students have not yet come forward in the desired numbers. Necessarily this has denied the institutes the scope for selective entry and, by stretching the range of ability within each course, has tended—as we mentioned in paragraph 37 above—to impair the effectiveness of teaching. It is not easy to provide a common basis for instructing a class where, as we observed at one institute, boys who have not sat for their General Certificate of Education mingle with those holding the G.C.E. with three passes at the advanced level. Occasionally the problem is further aggravated in Wales by language difficulties.

43. The failure to fill the one-year courses is therefore a matter of not taking up facilities that have been *expanded* since the war. As such it does not necessarily affect the prospects of filling the two-year courses, the revival of which would only amount to *restoring* pre-war provision.

44. Labour shortage on Welsh family farms is the most common of the many reasons given for the disappointing number of one-year students. If this is accepted then it would equally affect the intake into two-year courses but we are inclined to agree with those of our witnesses who argue that the two-year course represents a more complete break from the home farm, and that the objective, being more ambitious, is more likely to appeal to the Welsh parent.

45. Secondly, there is the argument that local prejudice or insularity, whether on the part of parents or L.E.A.s, is militating against the flow of students particularly from those counties, which are in a majority, where there is no farm institute. Judging by our impressions and our evidence, there is a good deal of force in this explanation and we think that the same situation might arise with diploma courses. We shall examine this matter more closely in the next chapter. Meantime, statistics and the testimony of our witnesses reveal that L.E.A.s responsible for farm institutes cannot always count on wholehearted support and a sizeable flow of students from adjacent counties. By the same token there is no absolute assurance that all Welsh L.E.A.s would wholeheartedly support a diploma course provided by one of their number, though we are certain that the W.J.E.C. would spare no pains to overcome any difficulty of this kind and promote the success of the course.

46. Thirdly, we have heard various doubts about the value of institute courses (notably because they do not lead to a recognised qualification) and we have heard criticisms about losses sustained on institute farms. The diploma course would not be subject to the first objection, but the second is a real one which, in our considered opinion, must be faced before a centre for two-year courses could stand any chance of success.

47. Next, it is sometimes argued that fees are beyond the parents' purse. We do not find this explanation very convincing, especially as generous awards and remissions are made by L.E.A.s, but to the extent that it could be true it would affect two-year courses more seriously than those lasting only a year. It is a factor to be borne in mind. High fees, unless accompanied by equally high and well-publicised awards and remissions, could detract from the response to diploma courses.

48. Finally, there is the deplorably persistent misunderstanding prevailing among many Welsh farmers that by releasing their sons for an institute course they will

prejudice their case for deferment from National Service when they return to the land. This fear is as unfounded as it is difficult to allay. Some of our witnesses regard it as an excuse for, rather than an explanation of, the present shortage of students. Whatever its substance, we should not expect this misconception to have any undue influence on the demand for diploma courses; the young men seriously embarking on two years of study, demanding a quite advanced standard of education, can be expected to take pains to satisfy themselves where they stand in the matter of military service.

The England/Wales approach to demand

49. We were faced with the controversial question whether to build our picture of demand on a combined England and Wales footing, as favoured by the M.A.F.F., or whether to give quite separate consideration to the needs of Wales as urged by, for example, the W.J.E.C.

50. We take this opportunity of commenting on the suggestion that language considerations call for separate provision in Wales. Knowledge of Welsh is an advantage for any employment in Wales and is virtually an indispensable qualification in, for example, most of Gwynedd. This applies to those with diplomas in agriculture and dairying—indeed the need for Welsh linguists in these industries is probably more pronounced than in essentially urban careers.

51. The great majority of our Welsh witnesses affirmed that no student qualified to undertake a course at diploma level could seriously suffer from linguistic difficulties, but at the same time it was much impressed upon us that the more natural and congenial atmosphere enjoyed by Welsh students among fellow Welshmen lends strong support to the case for courses in Wales.

52. Language considerations apart, we consider that Wales can reasonably expect its own provision for higher education of this kind and that its sons and daughters should not have to compete for places and pursue their studies in England where as many as seven diploma centres have been provided. In passing, we note that three diploma centres are available in Scotland and, while there may not be a case for Wales to have parity, it has a legitimate claim to at least one well-established centre.

53. Nevertheless, we might have found it embarrassing, particularly at the present time of retrenchment, to present a case for fresh capital and other expenditure in Wales if there had been vacancies at the corresponding centres in England. But that is not the case, at least for agriculture and dairy diploma training. For the present session the National Farmers' Union (N.F.U.) has informed us that English diploma centres, including the newly-established College at Shuttleworth, are over-subscribed.

54. In any event, we should not like to see any difficulties put in the way of English students who wish to study for a diploma in Wales or of Welsh students in England. This could all too easily lead to a wasteful distribution of facilities. It is a tradition in the Principality to welcome students from beyond Offa's Dyke.

55. The claim for separate courses in Wales, as we see it, is as much geographical as national. The seven English diploma centres are dispersed so that there are two each in East Anglia, the Midlands and the South-West, and one in the North. Six of them—four agricultural colleges and two farm institutes—were teaching for diplomas before the war. The two farm institutes (see paragraph 6 above) were allowed to continue diploma teaching to meet demand in their areas. The seventh centre, Shuttleworth College, was established by private trust in 1946. Since the war Wales has, by comparison, suffered the loss of one diploma centre (U.C.N.W.); the scope for the survivor has been restricted (U.C.W. having dropped its agriculture course); and there is a possibility of losing the little that remains (i.e., the U.C.W.'s dairy course).

56. To us it seems unsatisfactory that facilities in Wales should have dropped sharply (and *not* because of any decline in demand) over a period when the number of places in England has increased steadily. Accordingly, even if the problem were approached and demand assessed on an England/Wales footing, we consider that Wales would have an irresistible claim to priority for any new provision.

Interaction of location and demand

57. In our view the most powerful single factor influencing demand for courses is the choice of the diploma centre. Undoubtedly some teaching establishments can exercise a special "pull" on students, and indeed on parents and employers, whether by reason of tradition, environment, reputation, or more simply the personal qualities of the Professor or Principal in charge.

58. Thus of the present Welsh farm institutes, Usk (Monmouthshire) can rightly take pride in being the oldest establishment of its kind in the Principality with a history stretching back more than forty years and a certain "international" character about its roll of students. Gelli Aur (Carmarthenshire) has the double advantage of being in a Welsh environment and being universally acknowledged as having a special link with the dairy industry, lying, as it does, centrally in the most prolific milk producing, distributing and processing area in Wales. Glynllifon (Caernarvonshire) has the advantage of close proximity to U.C.N.W. and by its very location must have a special appeal to those who cherish the Welsh heritage and language. Llysfas (Denbighshire) also has a strong Welsh tradition enriched by a reputation in hill farming circles to which its prize-winning hill sheep flocks bear striking testimony.

59. In this section we are content to note the enormous influence of tradition, prestige and the like on the flow of students and to some extent on their subsequent careers. None of our witnesses has disputed the point, and many of them have specifically urged it upon us. We shall examine its implications in more detail in Chapter III.

The two aspects of demand

60. In the succeeding sections we examine separately the demand for diploma training in dairying, agriculture, and certain specialist subjects. In each case we have sought to determine not only the demand for such training among young people or their parents but also the demand from the industry for the diploma-trained product. These two features of demand do not necessarily keep in step; they depend heavily on the human element which is unpredictable in the present era of full employment and a changing attitude towards further education.

61. A basic need, or an obvious career prospect, for men and women with diplomas is not in itself a guarantee that students will come forward in the necessary numbers. Similarly, the fact that students apply for courses and secure diplomas does not in itself imply that the training is essential or that it will necessarily be turned to the best advantage when the student subsequently takes up employment.

62. Throughout our enquiry we have had these considerations very much in mind. At one extreme we have had to guard against recommending provision which could prove unnecessary and expenditure which might be abortive, or indeed provision on an unrealistic scale related only to the ideal. At the other extreme there is the danger of failing to meet legitimate demand. Between these extremes there lies a balance, and we have made every effort to find it.

(ii) DEMAND FOR DAIRY DIPLOMA COURSES

63. We deal first with the demand for dairy diploma training because courses are already established in Wales, albeit precariously, which gives us some tangible data on which to found our assessment.

The response to courses

64. During the six years 1950-55 U.C.W. received 286 applications for their dairy diploma courses and 119 new students were admitted (157 of the applications, and 68 of those admitted, came from Wales). Over the same period, 95 students from the 1948-53 intake (56 of them from Wales) completed their courses, 89 gaining the college diploma and 61 being awarded the N.D.D.

65. These figures must be interpreted with caution. For example, several candidates who did not secure admission in one session may have re-applied later. Moreover, uncertainty about the future of U.C.W.'s courses undoubtedly reduced the number of applications for the 1953-54 session, and therefore the numbers completing the course in 1955. Despite this, and despite withdrawal of the pre-war short and special courses in dairying (paragraph 26 above) admissions over the last six years represent nearly double the annual average for the ten years preceding the outbreak of war (see paragraph 2 above)—an average of nearly 20 students a year as against less than 11.

66. The figures also disclose a situation of special significance in our enquiry, namely that a diploma course in Wales can attract a high proportion of students from outside the Principality, at least for dairy courses. We attribute this largely to the prestige of U.C.W., but it may also reflect in some measure the withdrawal of dairy diploma courses from, for example, Reading University, and perhaps also the relatively low tuition fees charged at Aberystwyth (£35 per annum) compared with English N.D.D. centres (up to £160 per annum).

Career openings

67. We are satisfied that there are abundant openings in England and Wales for those who can gain their diploma in dairying. From informed sources, such as the Milk Marketing Board, the British Dairy Farmers' Association, and the National Dairymen's Association, we have been told that far more diploma material could be absorbed than is at present available. There is, in addition, a small but steady intake into the Ministry's advisory and milk-testing services.

68. There are no serious doubts that these openings for employment will continue for many years ahead. The annual intake of qualified persons into the dairying industry, whether on large dairy farms, in the laboratories or in the creameries or processing factories, is regular and certain. There is, of course, a high and regular wastage because many of the dairy diploma appointments are taken up by women who subsequently give up their work on marriage.

69. We have noted the modern trend towards degree teaching in dairy science and have considered the possible repercussions on the diploma level. Degree courses have already been introduced at Reading and Nottingham Universities and are foreshadowed at U.C.W. We do not expect this to have any significant effect on the numbers coming forward for dairy diplomas or on the careers open to them. The graduate will be aiming at more senior posts at managerial level or in research, while entry standards must severely restrict the numbers admitted for the degree course.

Our assessment

70. For dairy diploma courses, therefore, the demand is reassuring on both fronts. We can confidently report that a reasonable flow of students can be expected and that appointments are assured for those who succeed in their studies. Here, in our view, is an ample case for establishing a Welsh diploma course on a long-term footing and having sufficient resources to cope with an annual intake of at least 20 students. This would meet the genuine needs of Wales where dairying is a staple industry.

(iii) DEMAND FOR AGRICULTURE DIPLOMA COURSES

71. The likely response to agriculture diploma courses in Wales, and the Welsh need for such courses, are far more difficult to assess. While we are not exactly breaking new ground here, we are exploring a field that has lain fallow for nearly twenty years.

Estimating the response to courses—the pre-war picture

72. In paragraph 2 above we noted that during the ten years before the war, U.C.W. admitted 109 dairy diploma students, while U.C.W. and U.C.N.W. together admitted 111 agriculture diploma students—in each case an average of about 11 students a year.

73. In paragraph 65 above we noted that present-day recruitment for the dairy course has increased by nearly 100 per cent on pre-war, with the annual intake now averaging 20 students. If a revived agriculture course could look forward to the same increase on pre-war recruitment levels, about 20 students a year could be expected.

74. The statistics and trends for Great Britain afford every reason for expecting this increase on pre-war numbers to be achieved and probably exceeded. In the five years 1951–55 more than twice as many candidates presented themselves for the N.D.A. examination (1,654) as for the N.D.D. examination (678). Taking successes only, which is probably the best guide to true diploma material, the numbers gaining the N.D.D. have not yet doubled on pre-war, whereas those gaining the N.D.A. have more than trebled:

Diploma	Awards 1931–35	Awards 1951–55	Percentage increase in awards
N.D.D.	250	452	80%
N.D.A.	245	765	212%

75. Paragraph 65 above suggests that the intake of dairy students has not suffered from the loss of the U.C.W.'s pre-war short courses, but we suspect that the loss might be more apparent in the response to post-war agriculture courses. We understand that the dairy short courses were, compared with the agriculture courses, somewhat elementary.

76. One essential difference is that a diploma in dairying is generally an indispensable requirement for certain careers and that in itself prompts applications for the course. The agriculture diploma may similarly be indispensable for some appointments, but for those who intend to farm on their own account it is more in the nature of a long-term investment, the value of which may only become apparent over the years.

77. Another difference is that the candidate for the dairy diploma realises how much he must get to know, whereas very often the candidate for the agriculture diploma does not come forward until he realises how much he does not know. It was here that the pre-war short courses conferred a special benefit by awakening young agriculturists in Wales to the need for more and deeper knowledge of their subject.

78. We have come to regard this awakening and stimulation of demand as the key to the problem on the agricultural side. We are in no doubt that there are more than enough students of diploma potential in Wales to justify a course; our main doubt is whether, in the absence of "short courses," they would come forward in the necessary numbers. The representatives of the Ministry of Education were optimistic about the number of students that could be expected as a result of the establishment of day and block release courses. In the absence of tangible evidence, such as is available for dairy students, and bearing in mind the number of vacancies in farm institutes at present, we have regarded the matter as of first-class import-

ance in our enquiry and have questioned witnesses closely in an endeavour to obtain reliable data. The more significant points from our evidence are summarized in Appendix B.

Estimating the response to courses—the post-war picture

79. From this interesting and helpful spread of evidence we refer first to the statistics supplied by the Examination Boards which reveal that over the past five years an average of 6 or 7 Welsh residents have been annually examined for the N.D.A. The majority of them pursued their studies at the Royal Agricultural, Seale-Hayne and Harper Adams Colleges. It is perhaps significant that 3 were trained at Shuttleworth College (Bedfordshire) and 2 in Scotland. This may bear out criticisms we have heard about the distances ranged by Welsh candidates in their efforts to obtain places.

80. The numbers in paragraph 79 above are not exhaustive because other students from Wales will have studied at one or other of the centres in England or Scotland, and perhaps sat for the college or equivalent diploma, without subsequently presenting themselves for the national examination. The evidence we received from the Monmouthshire L.E.A. and the Royal Welsh Agricultural Society, taken in conjunction with the evidence of the Examination Boards (see Appendix B), suggests that this number falls between 6 and 13. To be on the safe side we have allowed for a minimum of 3 or 4 Welsh residents annually completing a two-year agriculture course in England *without* sitting for the N.D.A.

81. There is also the possibility that some Welsh residents, suitable for diploma training, have failed to obtain places in England or Scotland. The evidence of the Monmouthshire L.E.A. (Appendix B) and the testimony of other witnesses, point this way, and during our visit to Writtle Institute we learnt that some difficulty had been experienced in accepting Welsh applicants because of the inevitably different nature of their practical experience.

82. To arrive at a quantitative estimate of any genuine but unsatisfied demand from Wales would require considerable and detailed research, e.g., to ascertain how many applicants should not be reckoned either because they had simultaneously applied to two or more of the establishments in England or Scotland, or because they failed to satisfy minimum pre-entry qualifications. The picture we gained at Harper Adams College may be representative; of the 15 Welsh applicants for their 1956 course, 4 had been accepted and only 3 of the remainder complied with the College requirements—and they might be accepted in a later year.

83. Without, however, venturing into possibilities and probabilities of this kind, there is still tangible evidence in paragraphs 79 and 80 above that some 10 Welsh students a year are leaving the Principality to acquire diploma training in agriculture. We have little doubt that the majority if not all of them would prefer to train in their native country and we regard them as an assured *minimum* nucleus for a course in the Principality.

84. Beyond this we enter upon imponderables, notably the number of young people in Wales of diploma standard who do not take two-year courses for lack of a centre in Wales or a place in England. Of all our evidence on the subject the most conclusive is to be found, as we saw in paragraph 38 above, in the surprising number of diploma-standard students now taking one-year courses at Welsh farm institutes.

85. We unhesitatingly accept the testimony of the several Directors of Education, of Principals of farm institutes, and of H.M. Staff Inspector of Schools, which consistently discloses that some 20 per cent of the students at each Welsh institute (or about 30 students in all) have the educational qualifications, display the general standard of proficiency, and evince the outlook and interest which would fit them for places on a diploma course.

86. That these students (and their parents) are interested in further education is manifest from their presence on the one-year institute course. That interest should, in our view, see at least one-third (or not less than 10) of them opting for a two-year course provided they could study at a recognised centre in Wales. Indeed a higher proportion would almost certainly come forward if the centre had the special "pull" described in paragraph 57 above. Time and again our witnesses have emphasised that the flow of students into a Welsh establishment will vary directly with its status, tradition and prestige. Thus, if agriculture diploma courses were still available at the university colleges, we can suppose that most, if not all, of the 30 students mentioned in paragraph 85 above would seek admission.

Our assessment

87. In framing our assessment we prefer to rely solely on those of known talent in Wales who are either studying for the diploma or are capable of doing so and who have taken positive steps to acquire further education. We thus confine ourselves to a minimum figure of 10 students under paragraph 83 above, and the minimum of a further 10 under paragraph 86 above.

88. This enables us to foresee a response of some 20 suitable students each year for a diploma course in the Principality. Such an estimate is entirely consistent with the calculation based on pre-war figures in paragraph 73 above. In the process a handful of extra places would become available in England where, as we have been informed, all agriculture diploma establishments are turning away applicants.

89. Some of our witnesses have contended that the revival of a Welsh diploma course in agriculture would quickly reveal a latent demand among young agriculturists who, at present, are equally indifferent to a two-year course far away in England or a one-year course of lower-level instruction at their local institute. That may be so, and it would tend to support higher estimates or calculations of intake variously furnished in Appendix B; it would also permit of greater numbers, or a more selective entry, for any course that was introduced.

90. It is our general view, however, that any new course should be based on the expectation of up to 20 students a year as in paragraph 87 above, that it should be an experimental provision in the first instance, and that its future should be reviewed after a trial period of not less than five years.

Career openings and the needs of the industry

91. On completing an agriculture diploma course most students still require further first-class practical experience. Thereafter four main avenues are open to them. First, as farmers' assistants and assistant farm managers leading to jobs as bailiffs or farm managers; second, as technicians and field workers for commercial firms; third, overseas; and fourth, those students who return to their fathers' farms or even to farms of their own.

92. The distribution of students among these several careers varies considerably over both space and time. For example, there are far more managerial openings in counties of predominantly large estates than in those of small family farms; similarly, the number of posts in commercial firms has greatly increased since the war and no doubt fluctuates with prosperity in the farming industry.

93. The picture we gained at Harper Adams College was that, of the 45 students who completed their course in 1955 and did not subsequently enter the Forces, 21 (or nearly 50 per cent) obtained appointments as assistant farm managers, 8 went overseas and a further 8 continued with other studies, 7 returned to home farms, and 1 secured a post with a commercial firm. These details from the college nearest to Wales contrast with the overall picture for all diploma centres; the Examination Boards supplied us with an analysis of the preferences expressed

by N.D.A. candidates over the past three years, viz., one-third for practical farming, one-third for farm management, and one-sixth each for practical farming interests (e.g., on the landowning side), and for a variety of appointments at home or overseas. Latterly the Boards have noted a trend away from appointments with commercial firms and towards practical farming.

94. Our witnesses differed about the extent of the opportunities for agriculture diploma students for paid employment in Wales, but have been unanimous and insistent on the urgent need for more of them among the ranks of practical farmers in the Principality.

95. Weighing up our evidence, we rather doubt whether holders of the N.D.A. can find many openings in Wales for attractive paid employment. A nation of predominantly small family farms, with few large estates and still fewer "hobby farmers" requiring a skilled manager, cannot reproduce the market for N.D.A.s which undoubtedly exists in England. Harper Adams College reported that they were unable to satisfy the demands from the industry.

96. Herein lies a grave danger to agriculture in Wales. Just as it is a Welsh characteristic to take agricultural education in stages, so it is often a Welsh ambition to ascend the ladder of opportunity towards what are described as "white collar" jobs. In the agricultural world, as elsewhere, research, teaching, or advisory work is a magnet for the Welsh student and parent alike. These are primarily careers for degree students, but at diploma level the appointment as farm manager or bailiff assumes much the same attraction but can seldom be secured within Wales. To quote one witness: "In a peasant community the incentive to education, even agricultural education, is escape—escape from straightened circumstances." To the extent that this is true, Wales as a nation is progressively being drained of talent.

97. Yet there never was a time when Wales was in such dire need of retaining its best sons to better its own soil; nor a time when agricultural leaders required such a span of technical knowledge and could turn it to such immense advantage for their nation and industry. The recent report of the Mid-Wales Investigation by the Welsh Agricultural Land Sub-Commission (Cmd. 9361) and the succeeding White Paper issued by the Government (Cmd. 9809) illustrate some of the major problems now facing Welsh agriculture, and as the Minister himself said after visiting the area: "the answer is quite simply more and better technical education for the coming generations of farmers. I am absolutely convinced that this more than any other single thing will be a help to provide a long-term solution."

98. If, therefore, the Welsh rural economy is to be strengthened and is to throw up future leaders capable of shaping its agricultural destinies, it must retain more of its youngest and most gifted practical farmers. The experience of World War II brought out in clear relief the immense benefits of the pre-war diploma and short courses at the university colleges. We have the authority of the Welsh Secretary, M.A.F.F., for saying that it was from the ranks of those who took these courses that first-class leaders emerged to guide and expand wartime food production in Wales. Today they are still playing a notable part in furthering the development of the industry, whether through farming and landowning organisations, on county agricultural executive committees, or in the several agricultural organisations and societies. Many of them are now getting on in life, and there is no younger stock from Aberystwyth or Bangor to succeed them. Another international or economic emergency in the years ahead could see Wales desperately short of progressive leaders among its wealth of practical farmers.

99. Fortunately the vacuum (as it was described to us by Cardiganshire Education Committee) is not complete, thanks to the part played by the Young Farmers' Club movement. Yet their effectiveness is being blunted by lack of diploma material on the home farms of Wales. Our evidence from the Welsh County Federations, with over 11,000 members, disclosed the serious difficulties now being experienced by

the movement in Wales for lack of qualified assistance for their lectures, demonstrations, tuition and proficiency tests. Advisory officers of the National Agricultural Advisory Service (N.A.A.S.) are undoubtedly doing all they can to fill the gap, but they are relatively thin over the ground and with ever-increasing calls on their services, there must be a limit to the time they can give to assisting the Young Farmers' Clubs.

100. In fact nowadays when, compared with pre-war days, there are more and swifter technical advances in agriculture, there is a compelling need for a leavening of trained practical farmers well grounded in science and husbandry. Without them the genius and expense which go into research, experimental and advisory work, as well as the public money spent on improvement grants, production aids and subsidies, cannot be assured of optimum practical application. Farming is a conservative industry and progress comes largely from "looking over the hedge." It is here that diploma training, and the response of the diploma-trained mind, can render a real service to Wales.

Character of the course

101. It is, therefore, the needs of agriculture in Wales, even more than the question of careers, which reinforce the case for the agriculture diploma course we have recommended in paragraph 90 above. This prompts us to comment not only on the *size* but on the *nature* of the provision.

102. Agriculture diploma teaching in Wales, unlike that in dairying, should not, we believe, seek completely to reproduce the provision in England. We referred in paragraphs 24-25 above to the weight of evidence, which we accept, that a diploma course in Wales should be designed to meet the needs of that country. We have been impressed not merely by the number of organisations and witnesses who take that view, but the spread of interest and thought which they reflect ranging, for example, from the Professor of Agricultural Botany at U.C.N.W. to the Council for Wales and Monmouthshire and the National Union of Agricultural Workers.

103. We therefore recommend that the syllabus for any new centre in Wales should be suitably biased towards the problems and conditions of modern farming in the Principality. The exact bias is a matter best left to the experts, but in passing we should expect to see an exceptional emphasis on farm management, with particular reference to the economics of smaller holdings and upland farming, and the inclusion of forestry as something more than a sideline. The forestry syllabus might cater specially for shelter belts as well as the cultivation and uses of hedge-row and farm timber as recently advocated in the report of Lord Merthyr's Committee. Such a syllabus would tend to attract precisely the kind of student for whom the course is primarily recommended, namely those who intend to return to practical farming in the Principality.

104. Some of our witnesses favoured the institution of a separate Welsh diploma on the Scottish analogy, but there was no unanimity. The chosen centre could, like those in England and Scotland, award its own diploma which would doubtless reflect much that would be implicit in a Welsh N.D.A. Beyond that there is much to be said for Welsh students continuing to present themselves for the N.D.A. examination, not merely for the additional status thus acquired but as a very necessary measure to preserve uniformity within Great Britain in the standards of diploma teaching and awards.

105. As a corollary, however, we should hope that formal Welsh representation on the Examination Boards might follow any successful establishment, after its trial period, of an agriculture diploma course in the Principality. As we understand the position, Wales is at present represented more by the accident of personalities than because it is a nation whose agricultural future depends heavily upon young people of diploma standard returning to apply their studies to the land. We were gratified

to learn that if necessary the Examination Boards would be prepared sympathetically to consider ways and means of regularising their Welsh representation.

(iv) SPECIALIST DIPLOMA COURSES

106. Apart from agriculture and dairying there are as many as five specialist diplomas relating to the land, namely in agricultural engineering, estate management, forestry, horticulture and poultry. One of our witnesses went as far as to suggest that we should budget, over the long term, for separate courses in each of these subjects to be provided within Wales.

107. We do not necessarily exclude the possibility that in years ahead one or more of these subjects may justify a separate diploma course in Wales, but we are bound to report that, on the evidence presented to us, there is no clear demand for extending the Welsh provision beyond agriculture and dairying at the present.

108. Taking the subjects individually, we have noted that the existing centres in England are not experiencing any special pressure for places on their diploma course in *agricultural engineering*, and at Harper Adams College (where the course is to be discontinued), we were told that the market for the trained product is less favourable at home than overseas, where the demand is encouraging.

109. In the case of *estate management* we can only point out that during the 1930's, when a special diploma course was available at U.C.N.W., there were never more than two students attending in any one year.

110. In contrast, *forestry* is of increasing significance in Wales, and its integration with agriculture is a theme of the utmost importance at the present time. We have recognised this in advocating special emphasis on forestry in the agriculture diploma course. Later the case for a separate forestry diploma course in the Principality may emerge, but it is our impression that developments in that direction may have to await an increase in the number of diploma-level forestry posts that are available and in the number of Welshmen sufficiently interested to come forward for training.

111. Therefore, although we have been in touch with the Forestry Commission on the matter, and although we understand that the Commission are at present reviewing their own educational facilities in Wales, we have not felt justified in extending our detailed enquiries to take in forestry. Nevertheless, we see every advantage in any forestry diploma course in Wales being housed alongside the new agriculture course we have recommended.

112. The advantages of *horticulture* diploma courses have been mentioned in our evidence, and the strongest plea came from the Royal Welsh Agricultural Society. One of their spokesmen deplored the fact that Wales generally was not developing its seaboard to the best advantage and that the horticultural industry was not making the desired progress in, for example, Anglesey, the Llyn Peninsula and Pembrokeshire. It is probably true that the Welshmen's instinctive bias is towards livestock and grass and that if a specialist industry such as horticulture is to be developed a special interest must be created. So far as diploma courses are concerned we share the view taken by the W.J.E.C. that provision should be further considered in the light of the recent establishment of Wales' own Horticultural Institute at Celyn. Progress with the one-year course at the Celyn Institute, and the response and standard of students from Wales, should in due course enable the case for diploma training to be judged realistically.

113. Courses leading to the National Diploma in *Poultry Husbandry* are at present available only at the Harper Adams College where, we were told, there is scope for increasing the intake sufficiently, in the Principal's view, to satisfy the England-Wales requirement over the longer term. If a second poultry diploma centre proved necessary to meet increased demands, we should hardly expect that, in the best

interest of geographical dispersal, Wales could stake a particularly strong claim. We have noted that, during recent years, only a few students have attended the one-year specialist poultry course at Usk Farm Institute.

114. It will be apparent that we have not felt justified in entering at all deeply into the case for these specialist diploma courses. Inevitably we have concentrated on diploma training in agriculture and dairying for which specific applications were quoted in our Terms of Reference, whereas no formal requests have been submitted to the Minister to establish any other courses. More generally, we have found that reference to specialist courses of this kind has tended to be identified, in our evidence and in the minds of our witnesses, with the widespread desire to see an agricultural college established in the Principality. That is a matter which we can more conveniently examine in the succeeding chapter.

CHAPTER III

Location of courses

115. In Chapter II we have stated a case for Wales to provide diploma training for about 80 students at any given time, i.e., 20 each for the first and second year instruction in both agriculture and dairying. We now consider where they should be trained.

(i) THE PLEA FOR UNIVERSITY OR COLLEGE DIPLOMA COURSES

Synopsis of evidence

116. Our evidence on the siting of diploma courses has proved almost unanimous. The overwhelming number of organisations and witnesses have pleaded for retention of diploma training at the university colleges or, failing that, for an agricultural college to be established in Wales.

117. Both pleas are in fact consonant with the wider interpretation of our Terms of Reference and it is important that they should be seen in proper perspective. Certain Welsh L.E.A.s applied to establish diploma courses at their institutes, and their applications were included in our Terms of Reference, solely on the assumption that the University of Wales was withdrawing altogether from diploma teaching and than an agricultural college in Wales was not contemplated to fill the gap. Our evidence has persistently questioned either or both of these assumptions, and has been directed towards preserving the university courses or towards establishing a college. Without first exhausting both of these possibilities, few of our witnesses have been willing to consider seriously the scope for diploma teaching at Welsh farm institutes and the respective claims of centres such as Gelli Aur, Glynllifon and Usk.

118. Although, therefore, our Terms of Reference did not direct us primarily to consider whether the University of Wales should be asked to continue diploma training, nor whether the time is ripe for an agricultural college in Wales, it is our duty to present the state and weight of evidence on both subjects. Nor would it have been possible to ignore it.

Attitude of the University

119. Our witnesses have dwelt on the immense value of the historical ties between the University and the agricultural industry in Wales, on the excellence of the pre-

war diploma and short courses, and on the "pull" which the university colleges can exert on the young people of Wales. It is most remarkable that although the university colleges have not conducted diploma courses in agriculture for nearly twenty years, nevertheless, the quality and value of those courses remain the subject of persistent eulogies to this day.

120. By rendering such signal service to the nation and the industry the University not only built up a lasting tradition; it came to fill a role which it could not wholly abdicate without leaving the Welsh people with an abiding sense of loss. Our enquiry revealed Wales in this, as in other respects, looking to its University for leadership and inspiration.

121. In all fairness to the University, however, there must be a limit to the responsibilities which it can assume. Quite apart from the present doctrine of three tiers in agricultural education (paragraph 4 above) the modern trend in the universities generally is away from sub-degree teaching and towards an extension of research and post-graduate activities. These are fields where university resources, and often only university resources, can be turned to best advantage; this may be particularly true in Wales where, as has been pointed out to us by the Guild of Graduates of the University of Wales, there is relatively limited research provision. Moreover, without adequate development in these directions a university cannot expect to maintain its contemporary standing and prestige.

122. There is, in addition, the problem of financing diploma courses at universities. Exchequer grants to the universities are paid through the machinery of the University Grants Committee. In paragraph 11 above we noted the exceptional arrangement whereby, with the agreement of the U.G.C., the Ministry has been paying a small annual grant to maintain the dairy diploma courses at U.C.W. under the interim arrangements recommended by the Joint Advisory Committee. The U.G.C. have made it clear to us that they regard continuation of this N.D.D. course as an exceptional case and that as a matter of general policy they are reluctant to encourage any new sub-degree courses at a university institution.

123. In these circumstances we do not see how the University of Wales can reasonably be asked or expected to rescind the decision against diploma training taken (and subsequently reaffirmed) by its Academic Board. On the other hand, we should not like our report to be the instrument which severed one of the most valuable links that has ever been forged between the academic world and practical farming. We regard it as vital that the link should be preserved.

The ideal of a Welsh College

124. If they cannot keep their university system for diploma training, Welshmen understandably want an agricultural college of their own. The concept of a college has always had a special place in the hearts of those deeply interested in agricultural education in the Principality, but so long as Aberystwyth and Bangor taught for diploma as well as degree even the most fervent idealist seems to have been amply satisfied.

125. As the University has progressively moved away from diploma courses so this desire for a Welsh College has come into prominence. Today those who advocate the college do so either as a "second best" to restoration of the full pre-war university system or because they have discerned, in the changed attitude of the university authorities, no prospect of permanence in that system. Some have obviously identified our enquiry with the end of the "ancien regime" and have therefore seen in it the time and opportunity to translate the college ideal into reality.

126. It was here that we found in our evidence a remarkably widespread and spontaneous expression of Welsh feeling which transcended sectional or local interests. The spokesmen of the industry itself, whether through the National

Farmers' Union, the National Union of Agricultural Workers, the Royal Welsh Agricultural Society or the Welsh Federation of Young Farmers' Clubs, developed the theme of a college. Especially noteworthy was the fact that the W.J.E.C., as well as several individual Welsh L.E.A.s, defined the college as their ideal. Prominent witnesses in the field of agricultural education, such as Dr. Loveday himself, reminded us of the advantages of a college, and from university circles the argument was stated by the Agricultural Panel of the Guild of Graduates. Significantly, neither of the Government Departments concerned discouraged us from examining the case.

127. United in their recognition that a college was the long-term ideal, and in their plea that nothing should be done to prejudice it, the various witnesses differed on its immediate prospects. Some claimed that the college could be established forthwith; others foresaw difficulties in present circumstances, or doubted whether the case was yet mature.

128. We declare our full sympathy with this ideal of a Welsh Agricultural College, and this has materially influenced the shape of our recommendations. It will be apparent that in the two diploma courses catering for 80 students (paragraph 115 above) we have already recommended an experimental provision which, at least in scope and size, compares favourably with the latest English College at Shuttleworth.

129. The only way to safeguard the ideal of a college is to bring the agriculture and dairy diploma courses together at one centre. None of our witnesses has questioned the advantages or wisdom of doing so, and we recommend accordingly. The college ideal must recede if diploma courses, and the staff and capital outlay involved, are scattered around the Principality. *The simple fact is that Wales, by reason of its limited population and resources, cannot afford undue diffusion of its activities.*

(11) THE IMPLICATIONS OF CONCENTRATING COURSES

130. Apart from safeguarding the concept of a Welsh Agricultural College, the concentration of both diploma courses and 80 diploma students in one establishment has other important implications. It precludes us from finding in favour of the individual applications for *single* diploma courses quoted in (or arising from) our Terms of Reference, i.e., by the Caernarvonshire and Monmouthshire Authorities to establish courses leading to the N.D.A. and by the Carmarthenshire Authority for a course leading to the N.D.D.

Other effects

131. By bringing 80 students together under one roof, the conjunction of the two courses opens up possibilities of a very desirable corporate life among the future generations of agricultural leaders in Wales who would thus come together for their diploma studies. We think it better that they should congregate in this way rather than form a kind of select minority in the midst of institute students, generally younger and certainly studying at a quite different level.

132. Next, concentration may permit of some economy, or at least the optimum use, of teaching staff and facilities. This was one of the principal points registered in a detailed memorandum we received from the County Councils' Association—and we understand that their conclusions were only reached after penetrating discussions with the Principals of the Essex and Lancashire Farm Institutes.

133. It would be difficult to defend laying out a good deal of capital and providing a complement of teaching staff of the necessary standard exclusively for a single diploma course of 40 students divided between the first and second years of their studies. Clearly, if facilities and teaching staff are to be provided for diploma-level

training they should preferably be used, so far as possible, for instruction at that level. Concentration of both agriculture and dairy courses at one centre would help to do this, especially as the two diplomas have basic sciences and some elements of husbandry in common.

134. The alternative is to harness any surplus diploma facilities and teaching resources to other levels of instruction. This brings in all the arguments for segregating two-year diploma training from the one-year (certificate) and three-year (degree) courses. These arguments have been stated at length by earlier Committees (paragraph 5 above) and we do not propose to enter into, or to repeat, the case. The important consideration from the standpoint of our enquiry is that experience with combining diploma training with certificate teaching as at Hutton/Winmarleigh and Writtle Farm Institutes, or with degree teaching as at Nottingham University and U.C.W., indicates that there can be successful departures from the general doctrine.

Diploma training at English farm institutes

135. Concentration of the courses also enables us to draw freely upon the experience of diploma training at the Essex and Lancashire Farm Institutes, both of which teach for at least two diplomas. Recognition of these institutes for diploma training has called for special consideration on our part because it has been adduced in our evidence as an argument for a similar arrangement in Wales. Two questions have been uppermost in our minds. First, whether the experiment has succeeded; and second, whether similar conditions are reproduced in Wales.

136. The Essex Institute at Writtle is probably unique. It has the distinction of being the oldest farm institute in the country and it has always featured advanced-level teaching. Before the war Writtle prepared students for the B.Sc. (London) as well as for diplomas in agriculture, horticulture, dairying and poultry husbandry. Since the war, courses leading to three of the national diplomas (agriculture, horticulture and agricultural engineering) have been provided. We were not surprised to learn that it has been recommended that *Writtle should ultimately become a college and that a farm institute should be established elsewhere in the county.*

137. We understand that this possibility of uplifting the status of Writtle is still under active consideration. As a potential development it is of first-class interest to our problem in Wales; first by suggesting that a college can emerge from a *concentration of successful diploma courses*; and second as an indication that in Essex the provision of one-year farm institute courses and two-year diploma courses may not necessarily continue in the same establishment.

138. The Lancashire Institute is also unique in that it consists of *two establishments* respectively at Hutton and Winmarleigh, each having an institute farm. The dairy courses are centred on Hutton and the agriculture courses on Winmarleigh, though both are under common direction and control and share various teaching staffs and facilities. We have not visited this institute because it seems to us that conditions of this kind are neither reproduced in, nor are relevant to, any of the Welsh farm institutes where diploma courses might be provided.

139. Two other features of the Lancashire Institute are, however, relevant to our problem. One of the grounds for approving an N.D.A. course at Winmarleigh was geographical in the sense that there was no agricultural college in the North of England; this lends force to the identical argument which we stated for Wales in paragraph 55 above. Secondly, and this again is relevant to our own proposal for Wales, Winmarleigh's N.D.A. course has only been sanctioned experimentally on special conditions, including an understanding that its future will be reviewed by the Ministry before Michaelmas, 1958.

140. Clearly recognition of these two English institutes for diploma training has been exceptional and it is significant that all other applications from L.E.A.s in

England have been rejected. Moreover, it is a key consideration in the applications from Welsh L.E.A.s that they come from counties having a relatively small catchment area (e.g., Caernarvonshire with 4,971 farms over one acre, Carmarthenshire with 7,761 and Monmouthshire with 4,188) which are thus dependent on the interest and goodwill of neighbouring Authorities for their flow of students. Here again the same conditions are not reproduced either in Lancashire (17,266) or in Essex (9,545).

141. Our general conclusion is that the precedent and experience of the Essex and Lancashire Institutes are neither powerful nor particularly valid arguments for a comparable long-term arrangement in Wales.

(iii) USE OF A WELSH FARM INSTITUTE AS A DIPLOMA CENTRE

142. From this point we have naturally directed our thoughts towards the possibility of providing the combined agriculture and dairy diploma courses at one or other of the Welsh farm institutes. We have examined this problem by addressing it to all the L.E.A.s directly concerned, by visiting each of their institutes, by reference to arrangements in England, and subsequently by questioning the great majority of the organisations and persons who presented us with evidence.

Factors influencing the choice

143. If the two diploma courses were to be provided at one of the Welsh farm institutes we should expect the choice to turn on three factors in the following order of importance:

1. The attitude of the L.E.A. concerned.
2. The "pull" of the particular institute (see paragraphs 57-59 above).
3. Cost.

We advisedly put the cost factor last. However cheaply a particular institute could be converted for diploma teaching, whether exclusively or alongside the farm institute courses, it would be wrong to pursue the possibility without the whole-hearted support of the L.E.A. concerned, and false economy to proceed without the assurance that students would be attracted in the desired numbers, which is the first condition of a successful course.

Attitude of the L.E.A.s concerned

144. The attitude of the Welsh L.E.A.s concerned presents no difficulty. The Caernarvonshire, Carmarthenshire and Monmouthshire Authorities have each indicated their willingness to provide the two diploma courses at their respective institutes. They have furnished us with helpful though necessarily tentative estimates of probable cost with an assurance that they would provide any supplementary facilities or staffs that might be required.

145. We also believe that each of these Authorities would accept what we regard as a fundamental condition, namely, that the new diploma centre would be a Welsh national institution and not the prerogative preserve of any particular L.E.A. Only in this way would there be any real scope for the link with the University of Wales which we are so anxious to preserve and which has been urged by the Council for Wales and Monmouthshire as a concomitant to any institute diploma training. A sensible arrangement would be on the lines suggested to us by the Carmarthenshire L.E.A.; they visualised that the territorial Local Authority, while surrendering overall control, would be responsible for day-to-day management.

"Pull"

146. For the purposes we have in mind the respective attractions of the three institutes (or more explicitly their "pull" on students) depend on their *tradition*

and situation. We dismiss from the reckoning matters such as facilities and the standard or prestige of teaching staffs because the addition of 80 diploma students must bring far-reaching changes to any establishment previously catering only for one-year courses. These matters enter into the factor of cost rather than "pull."

147. To the extent that age is one of the factors in *tradition*, Usk would be favoured as the oldest farm institute in Wales (incidentally it provided its own diploma course before the war), with Gelli Aur the next and Glynllifon the youngest (though, of course, not without an inherited tradition from Madryn Castle). The reverse order obtains if regard is paid to one aspect of *situation*, namely proximity to the university agricultural departments. If the link between the University and the new diploma centre is to be anything more than nominal, Glynllifon has the advantage of being on the doorstep of U.C.N.W., whereas Gelli Aur and Usk are respectively about 50 and 100 miles from U.C.W.

148. From another aspect, *situation* points to Gelli Aur because Carmarthenshire, while by no means central in the Principality, does not lie at an extremity like the counties of Caernarvon or Monmouth. We are confronted here with the very real problem of "The North" and "The South" in Wales, and we cannot ignore the testimony of several witnesses who have said that if Usk taught for diploma, students from North Wales would still look to Harper Adams College and, by the same token, that South Wales students would apply to the Royal Agricultural College, Cirencester, or to Seale-Hayne College rather than to Glynllifon. Either tendency could prejudice the success of the courses and wreck the ideal of an "all-Wales" college.

149. Summing up on the paramount consideration of "pull," we cannot discern that any of the three institutes has a decisive advantage. Yet our very first witness (the Permanent Secretary to the Welsh Department of the Ministry of Education), and so many who succeeded him, contended that it should be the main criterion for siting diploma courses. On balance Gelli Aur alone seems to us to avoid any extreme disadvantage and our report would be incomplete without a reference to its truly magnificent site. Nobody who, like ourselves, has stood on its battlements overlooking the fertile Towy Valley, could fail to be immensely impressed by the amenities it offers.

Accommodation costs

150. We approach the *cost* factor in the knowledge that, in terms of accommodation alone, no Welsh institute (except, perhaps, Glynllifon) is in an immediate position to take 80 *additional* students, particularly at diploma level. As we see it the impact at each of the individual institutes would be broadly as follows:

- (a) *Gelli Aur* would need to surrender, and adapt as necessary, the accommodation now available for 50 one-year students and provide 30 additional student places. A possible arrangement, as the Carmarthenshire Authority were disposed to agree, would be for one-year courses to revert to the earlier establishment at Pibwrlwyd, which is still maintained by the L.E.A. Pibwrlwyd previously accommodated 24 one-year students so that it would need to be expanded considerably.
- (b) *Glynllifon* has exceptional scope for expansion within the present mansion. The Caernarvonshire Authority regard agricultural education as having first claim on the available space so that, by displacing other residential further-education activities that have developed there and effecting the necessary conversions, it is easily conceivable that the proposed 80 two-year places and the present 40 one-year places could be provided under the same roof. The alternative, as with Gelli Aur, would be to transfer one-year teaching, which the Authority would be reluctant to drop, to a separate establishment, e.g., if a separate establishment, such as the previous farm institute at Madryn Castle, could be acquired.

(c) *Usk* can, by utilizing temporary accommodation, house about 100 one-year students. Our impression is that there would be little difficulty in converting the present accommodation so as to house 80 two-year students, but it would be a major contract to extend the premises, or to open a fresh establishment (there was no earlier institute in Monmouthshire) so as to restore up to 100 places for one-year courses.

151. Viewed solely in terms of accommodation, therefore, the most inexpensive short-term arrangement would probably be to expand Glynllifon for courses at both levels. Taking a long-term approach, however, we refer again to the recommendation that college status for Writtle would involve the setting up of a separate farm institute elsewhere in Essex (paragraph 136 above). If there is to be a college in Wales it would be wise to envisage a break with one-year teaching from the outset. To do so our comparison of accommodation costs would have to take account of expenditure at possible alternative centres for farm institutes.

152. We have not felt justified in extending our review of costs in this way. If a particular institute were taken over for diploma courses the present incidence of vacancies on one-year courses (paragraph 40 above) might not justify developing a fresh centre for institute training. That is a question of policy quite outside our Terms of Reference. Nor, if it were policy to provide a new institute, would it be appropriate for us to specify the size and site, without which we were in no position to offer the L.E.A.s a firm basis for rendering revised estimates to include not only diploma requirements but also the future of one-year courses. We must be content with noting, in passing, that only the Carmarthenshire Authority has at its disposal a "ready-made" alternative home for certificate students.

Other costs

153. Besides accommodation, our analysis of the *cost* factor must take in any necessary strengthening of teaching staffs and facilities such as laboratories, lecture and study rooms, libraries, workshops, farm enterprises and especially the heavy capital equipment (e.g., a steam-raising boiler) required for N.D.D. teaching. Here again the gross cost would embrace not only conversion or new provision for diploma courses but also new or revived provision for certificate students.

154. Any calculation of absolute or comparative costs is, for good reasons, extremely complex. Of necessity we had to ask the individual L.E.A.s for estimates to meet a purely hypothetical situation. For example, in paragraph 151 above we referred to the limits which we felt bound to impose on ourselves when enquiring into the future of one-year courses, with the result that we could only ask for estimates framed on the assumption that diploma and certificate students would share accommodation, teaching staff and other facilities. Whilst this might be a temporary expedient to cut down costs we should reject it as a long-term arrangement on the grounds stated in paragraph 151 above.

155. Moreover, in the nature of the case, none of the L.E.A.s concerned have had any intimate experience of training for national diplomas or with the standards and requirements involved, though they left us in no doubt that they would be fully receptive to guidance and advice. We aggravated their difficulties by introducing the proposal for concentrating the two diploma courses, a proposal quite at variance with their original applications and their associated estimates.

156. In the particular case of staffing we are bound to question any assumption, which may underlie some of the L.E.A. estimates, that changes would be confined to extra appointments. Certificate and diploma levels are not contiguous; the one is not simply an advanced version of the other—the gap between them is so pronounced that successful teaching for the former is by no means an automatic qualification to lecture for the latter. We are mindful here of the advice of a prominent

witness who warned us that any "surgical operation" on institute staffs could leave a legacy of bitterness on which it would be difficult to build a tradition for the future.

157. We are also bound to question any assumption, which may similarly underlie some or all of the L.E.A. estimates, that common lectures and practical work could be given for certificate and diploma students. We should not favour any arrangement of that kind. It would tend to aggravate the difficulties already being experienced by the range of educational standards and abilities now found among the present institute classes (paragraph 37 above), and we were not surprised to learn from the County Councils' Association that the teaching is kept entirely separate at both the Essex and Lancashire Institutes.

158. It follows that a full complement of diploma-level teachers would be required, and little or no economy of teaching staff would be achieved, unless existing staffs at any institute had time on their hands which could be devoted, within normal working hours, to the instruction of diploma students. To the extent that this might be the case at any Welsh institute we should expect it to proceed not from over-staffing but from the present shortage of students on the one-year courses. We are not entitled to assume that this shortage will persist, much less to expropriate, for our diploma courses, staff whose appointments were approved for other purposes. In fact, we suspect that any significant economy of teaching staff yielded by combining one-year and two-year courses could only be achieved at the expense of the one-year students for whom the institutes were founded.

Limited value of estimates

159. It is scarcely surprising that the estimates framed by the L.E.A.s in these difficult circumstances fell short of those formulated by the Examination Boards as the minimum requirements if the particular institutes were to be recognised for courses leading to their national diplomas. Without the assurance of such recognition we could not, of course, recommend courses at any centre. However, even the Examination Boards could not present detailed estimates; first because, like ourselves, they were not strictly involved in the future of one-year courses; and second because they had not inspected the institutes, although one or other of their representatives happened to have recently visited them.

160. Our own impressions, reinforced by our discussions with representatives of the Ministry of Agriculture and with other witnesses, tend to support the general conclusion of the Examination Boards that heavy capital expenditure, increased annual costs, and quite far-reaching staff adjustments would be implicit in the conversion of any of the institutes to teach for both diplomas. Some picture of the possible scale of expenditure involved can be gained from the fact that both the Examination Boards and the Country Landowners' Association were of the opinion that the least expensive proposition would be the conversion of the Usk Institute. The Authority estimated that this would involve an initial outlay of £68,000 (plus an increase of £11,500 in annual costs, including loan service charges) to put courses for 42 diploma students on a permanent footing alongside the existing one-year courses.

Grounds for an alternative solution

161. No obvious choice emerges from our survey of the three institutes. *Tradition* may point to Usk, and *situation*—according to how it is viewed—to Glynllifon or Gelli Aur. The *cost* factor can point to any one of them, depending on the future policy for one-year courses and whether a long-term or short-term arrangement is adopted for diploma courses.

162. We have not been able to establish that any one of the institutes would exert a special "pull" on students, though we consider that Glynllifon and Usk are less

favourably placed, geographically, for an "all-Wales" venture. For this reason alone, if the choice were narrowed to one of the farm institutes, our preference would be for Gelli Aur.

163. Nor have we been able to single out any particular institute in the interests of economy. We believe that it would be a relatively costly proposition to use any of them for the combined diploma courses, especially if certificate students were to be displaced as a step towards the college objective. The institutes have been laid out, equipped and staffed for a given number of students at a particular level of instruction; even if they could readily be adapted for a different number of students pursuing a quite different level of studies, and we are by no means satisfied that this is the case, there would still be separate outlay to make good the existing institute provision. If a centre is to be found for 80 new diploma students it would normally be more economic to make new and direct provision for them rather than evacuate an existing establishment and then transfer its courses to a fresh centre opened for the purpose.

164. Inevitably, therefore, we have come to question whether there are compelling arguments for disturbing the present institute structure. We have not found any. So we have adopted the wider interpretation of our Terms of Reference and in our concluding chapter we develop an alternative solution.

CHAPTER IV

Proposals for a diploma centre

165. We have explained why, to preserve the university traditions from the past and the college ideal for the future, we are convinced that the two Welsh diploma courses should be established at one centre associated in some way with the University of Wales; and why the quest for that centre has taken us beyond the farm institutes in the Principality.

(i) THE BROAD CONCEPTION

Our quest

166. Our survey of the farm institutes has brought out the essentials we are seeking. We want a centre which the Welsh nation will cherish as its own; one attracting students with the power that only proximity and patronage of the University can impart; and one that, without undue expense, will maintain the legacy of diploma standards and traditions bequeathed by the University.

Our proposal

167. Inevitably, we have returned to where the traditions were born. Our proposal is that there should be established, at Aberystwyth, a National Agricultural College of Wales affiliated to the University of Wales. That is our main recommendation, and a centre such as we have in mind would benefit immeasurably if it could be closely identified with all Welsh L.E.A.s through the medium of the W.J.E.C.

168. We have chosen Aberystwyth rather than Bangor partly because it is more central; partly because it has a history of dairy as well as agriculture diplomas; but also because in the U.C.W.'s dairy department, with its experienced staff and excellent equipment, there are, we understand, resources some of which might be available to a new centre in suitable circumstances. To the prospect of continuity of tradition there was added probable economy of outlay.

Possible reception

169. It would have been presumptuous on our part to have assumed at the outset that a proposal of this kind would necessarily commend itself either to the University or to the L.E.A.s; nor should we have felt justified in developing it without some indication of their attitude. So we discussed the matter with the representatives of the W.J.E.C. and later informally with the Vice-Chancellor and other representatives of the University. In both cases we were left with the assurance that our main recommendation would be given most sympathetic consideration.

170. We can be more categorical about the reaction from those quarters interested in diploma courses, though not constrained by any implication of responsibility for providing them. The project took shape in our minds as our enquiry developed, and during the later stages of our discussions we were able to sound the views of witnesses from as many as eleven organisations quite specifically upon it. In every case the response was most favourable and can be crystallized in the words of one witness who, welcoming the proposed centre because of the prestige it would command, predicted that: "the magic name of Aberystwyth would underwrite its success and ensure a flow of students not only from Wales but also from England and Scotland . . ."

171. Re-assured that there was no obvious impediment or objection to our proposal, we have felt justified in elaborating it. In doing so we have tried to avoid the extremes of omitting essentials, of entering too deeply into detail, and of trespassing beyond our province. If the proposal is adopted, its implications will presumably be decided by the Ministry and the University in consultation with the W.J.E.C. and other interested parties, while the detailed task of implementing it will doubtless be remitted to the Governing Body of the new College.

(II) PROPOSALS FOR AN AFFILIATED COLLEGE

Affiliation

172. It would be for the University of Wales to define the acceptable pattern and conditions of affiliation and whether it would be direct to the Federal University or through the nearest of its agricultural departments, namely, U.C.W. In urging the affiliation of the proposed College to the University we note that the concept of affiliated institutions is well known and established in Wales through the existence of the Theological Colleges. We confine ourselves to describing some of the more important advantages we hope the affiliation would confer.

173. First would be the vital matter of preserving high standards. We can suppose that it would be a condition of affiliation that entry qualifications for the College, the appointment of its teaching staff, and internal examining standards would be subject to University supervision. In Chapter II we referred to the need for Welsh bias in the agricultural syllabus (paragraph 103 above) and for the internal diplomas to have a special Welsh significance (paragraph 104 above). Much would be gained if the University could contribute its experience to the syllabus and its name to the diploma. No doubt it was with these possibilities in mind that the Examination Boards were able to indicate that the centre could be assured of recognition for national examination purposes.

174. Next come the benefits which could be enjoyed by the students. Above all would be the inestimable benefits of contact with university atmosphere and activities and all the intellectual and social stimulus that goes with them. There may be scope for tangible benefits to be accorded on the analogy of the U.C.N.W.'s associated Theological Colleges whose students are enabled to regard themselves as members of the University College and enjoy the same status and privileges as other students and on the same terms. Beyond this are the special advantages peculiar to Aberystwyth, and deriving from the presence in or near the town of

the National Library for Wales, the Welsh Plant Breeding Station and the Welsh headquarters of the N.A.A.S., etc.

175. Finally there would be economy to the extent that affiliation permitted any pooling of resources. Here, as we have already mentioned, our thoughts have been directed especially to the high quality and cost of the heavy apparatus and other varied equipment in U.C.W.'s dairy department. We understand that in future the resources of this department will be increasingly geared to degree teaching in dairy science, but we confidently believe that satisfactory arrangements could be devised which would make them available for diploma instruction. On the other hand, we do not foresee that any substantial sharing of staff would be either practicable or desirable, especially in view of the University's research programmes. There would, however, probably be subjects (e.g., veterinary science) where it could be to the mutual advantage of the University and the College to share the services of a particular lecturer whom neither might be able to employ full-time.

Administration

176. We recommend that the affiliated College should be administered by a Governing Body of fifteen persons, of whom six would be representatives of the University of Wales, six of the W.J.E.C. and three independent members nominated by the Minister of Agriculture, Fisheries and Food, doubtless in consultation with the Minister of Education. An assessor would presumably be appointed from the Welsh Department of the M.A.F.F. and it would be in keeping with the custom in Wales if the Governors elected their own chairman. We assume that the Minister of Agriculture would launch the Governing Body and that thereafter its constitution would provide for any necessary replacements or rota of retirements.

177. The Governing Body would be mainly concerned with questions of broad policy and we recommend that day-to-day business should be delegated to an Executive Committee drawn from the Governors themselves and consisting of two representatives each from the University and W.J.E.C., together with one of the Minister's nominees.

178. We are of the opinion that the submission of regular reports and arrangements for inspection of the College are matters best left to the M.A.F.F., the University and the W.J.E.C.

Finance

179. In recommending financial provision for establishing and maintaining the College we have had regard to the arrangements for agricultural colleges in England, though we have found that some departures would be advisable to recognise and meet the special circumstances of the "all-Wales" venture which we have in mind and which has no counterpart over the border.

180. In the case of non-recurring expenditure—notably, in this instance, initial outlay—we should favour the prevailing arrangements which apply to English colleges whereby the entire cost is met by the Ministry of Agriculture (subject only to the special arrangement that half the expected farm profit is set off against the capital grant).

181. Other expenditure at English colleges, where not covered by endowments, etc., is met from fees and from the Ministry of Agriculture's deficiency grants determined on a quinquennial basis. It seems to us that different arrangements would be necessary for the Welsh College if only to secure, for diploma students resident in Wales, fees related to those now charged for the course at U.C.W. leading to the N.D.D.

182. The present tuition fee for U.C.W.'s dairy diploma course is £35 a session—though we understand that some increase may prove necessary. This compares

favourably with tuition fees for the corresponding course at Nottingham University (£55 13s. 0d.), and is well below those charged for the various diploma courses at English colleges and farm institutes, e.g., Studley (£105), Writtle (£108 for out-county students), the Royal (£130), Harper Adams (£155), and Scale-Hayne (£160).

183. Our difficulty is that the success of the affiliated College would certainly be prejudiced if, to conform with the level of tuition fees in England, it was obliged to charge Welsh diploma students virtually treble the £35 a session now paid by dairy diploma students at U.C.W. On the other hand, the Ministry of Agriculture could scarcely be expected to make good the entire deficiency on running expenses (as broadly obtains with English colleges) unless tuition fees were broadly in step with the pattern in England.

184. We can see no obvious reason why tuition fees for students outside the sphere of the W.J.E.C. should be materially less than those charged at English centres, and a fee of £100 appears to us to be quite reasonable. If, as we recommend, there is to be a differential fee for Welsh residents, and £50 per session would be more in sympathy with the present position at U.C.W., the balance of income should properly be found from Wales.

185. In addition to its annual M.A.F.F. grant, U.C.W. has been fortunate in receiving special grants from certain Welsh L.E.A.s towards the cost of maintaining the dairy diploma course. Some of our witnesses have criticised the fact, which is due to responsibility for university grants being taken over by the U.G.C., that these voluntary and generous L.E.A. contributions do not attract the 60 per cent grant-aid paid by M.A.F.F. on all other expenditure for full-time agricultural education. We believe that in these grants there is a basis for a satisfactory, and we hope acceptable, arrangement for securing preferential treatment for Welsh students while balancing the finances of the College.

186. We recommend that the running expenses of the College should be met partly from fees and partly from a deficiency grant from L.E.A.s in Wales and Monmouthshire perhaps calculated on a quinquennial basis and presumably apportioned between the Authorities by the W.J.E.C. *We further recommend that all such L.E.A. contributions should attract 60 per cent grant-aid from the Ministry of Agriculture.*

187. In the succeeding section we shall demonstrate that, under arrangements on these lines, the net L.E.A. contribution may average as little as £200 p.a. per Authority. We regard this as a very reasonable investment to secure a special Welsh status for the College and favourable treatment for its Welsh resident students; it would be consistent with the major participation of the L.E.A.s in administering the College, and would give them added grounds for encouraging suitable students in their areas to apply for training.

Phasing of the project

188. Although we have not concerned ourselves with the possible phasing of the project it is obviously desirable that the present N.D.D. course in Wales should be continued as a going concern until the College has been established. We hope that U.C.W. will see its way to continuing its N.D.D. course for the interim period, and that the appropriate Government grant will be available to it for the purpose.

(iii) COST

189. Despite the many advantages of an affiliated College, and the widespread approval and support it would apparently enjoy, we should have hesitated to develop our proposal if the cost had been disproportionate or if we could have pointed to an alternative which was significantly less expensive. Neither possibility emerged during our review of the likely cost of the College.

190. When we were considering the Welsh farm institutes, and the probable cost of converting any of them, we found two features which subsequently confronted us again when entering into the £ s. d. of our affiliated College. First, that it must be a major contract, in any circumstances, to provide for 80 new students at the relatively high level of diploma training; and second that it is most difficult for those who have not actually provided diploma courses accurately to estimate the true cost of doing so.

191. In presenting the succeeding analysis we have drawn freely upon, and are much indebted for, advice from the Ministries of Agriculture and Education and from the staff of U.C.W. Our findings on capital expenditure and running costs are set out in Appendix C and are more an indication of minimum cost for necessary items than an overall estimate allowing for all possible contingencies. Estimates for an entirely new project are always susceptible to the unforeseen, particularly in a period of rising costs.

Boarding accommodation

192. One great advantage of Aberystwyth is that there is no immediate necessity or justification for new expenditure on hostel accommodation. The diploma students could either take lodgings in the town or, as may be preferable, the College could enter into an arrangement with two or more of the large boarding establishments and thus concentrate the students in a few premises. U.C.W. has already adopted this latter arrangement for some of its students and it does not give rise to any charge on University funds.

193. If, at any time, there were grounds for providing the College with its own hostels the most economical arrangement would be to convert two of the largest boarding establishments in the town each to take 40 students. Experience suggests that the cost would be approximately £20,000.

The College

194. A new building would be required for the College itself and, without entering into architectural detail, we suppose that it would be less expensive to build upwards, i.e., on two or perhaps even three floors. The minimum requirements for lecture, preparation, staff or study rooms, laboratories and administrative offices are shown in Appendix C, and the outlay of £34,350 (which includes equipment and furniture) has been estimated primarily by reference to the Ministry of Education's standard provision for new educational buildings. Purely local circumstances could give rise to additional expense, e.g., if it proved necessary to finish off the building in stone to conform with local planning considerations, or if it were not possible to draw upon the resources of apparatus and equipment in U.C.W.'s dairy department.

195. From exploratory enquiries we have reason to believe that a suitable site, or choice of sites, would be available within the precincts of Aberystwyth.

The farm

196. Provision of a farm presents rather more difficulty and depends a good deal on interpretation of need. At one extreme some of our witnesses have suggested that no outlay would be necessary and that students could gain all the necessary access for practical studies if the College were associated with a panel of suitable local farms and if students had facilities to visit the special educational and experimental establishments in the vicinity (e.g., the Plant Breeding Station, the N.A.A.S. Husbandry Farms at Trawscoed and Pwllpeiran, U.C.W.'s present farm and their hill farm which is envisaged, etc.). At the other extreme it could be argued that the College's facilities should be in no way inferior to those available at diploma establishments in England where the farms invariable exceed 300 acres, and sometimes approach 700 acres.

197. Our estimate lies mid-way between these extremes. We recommend that the College should have its own farm which should be reasonably representative of the pattern of agriculture in Wales and as such need not be very large. In this way the course for the agriculture diploma would be conditioned to its primary purpose of catering for those returning to practical farming in the Principality. A holding of around 200 acres might meet the case, and again we have satisfied ourselves that it should be possible to acquire a property of this kind reasonably near Aberystwyth. In estimating the cost at £16,000 (Appendix C) we have assumed that the farm will either be in sound condition and therefore relatively expensive to purchase, or else that a good deal would have to be spent on renovation. In either event our estimate includes provision for live and dead stock, but floating capital would also be required.

Summary of capital costs

198. Despite the saving of any capital outlay for student accommodation, at least £50,350 would therefore be required to build the College and provide its farm. At this stage in our review we paused to consider whether expenditure of this order could be reconciled with the trial footing we have suggested for the agriculture diploma course.

199. We have every reason to believe that an agriculture course at the College would succeed more particularly because students are likely to be drawn to Aberystwyth and because affiliation with the University would safeguard the essential standards and traditions. Beyond this, in the unlikely event of the course having to be abandoned after a trial period, it should be possible either to recover the bulk of the capital outlay (e.g., by selling the farm) or to turn it to good account (e.g., U.C.W., who are progressively expanding their activities to meet the expected "bulge" in university intake, could no doubt use extra laboratories or lecture rooms). To a comparatively modest scale of capital expenditure, therefore, Aberystwyth also offers assurance that a substantial "white elephant" would not be created.

200. Conversely, if the College achieves the success we confidently predict, the time may come when, as we saw in Chapter II, there may be a case for developing other specialist courses. In particular we referred to the advantages of providing any new diploma courses in forestry alongside those in agriculture. On this score Aberystwyth, which is the H.Q. of the Forestry Commission for Wales and has a notable hinterland of forest plantations, has a potential for the future as well as attractions for the present.

Running expenses

201. Appendix C depicts the kind of running expenses that would be involved at the College. Provided the desired aggregate of 80 students can be achieved, it should be possible to strike an effective balance between teaching staffs and student numbers, though in some instances we can foresee economy if staff can be shared with organisations such as U.C.W., its agricultural economics department and the Cardiganshire L.E.A. We recommend a complement of 8 teaching staff (3 shared with other organisations) for 80 students.

202. We are emphatic that the choice of a Director for the College could make or mar its success. It will be a key post, and we recommend that the person appointed should be of professorial calibre. This view is conveyed in our estimate of £2,000 for the annual salary attaching to the post.

203. The remainder of the running expenses would be in the nature of maintenance costs and do not call for any special comment beyond the fact that we have proceeded on the very desirable assumption that the farm account should at least break even. The weight given to farm management in the diploma syllabus is likely to increase,

and in our opinion diploma students cannot master its essential principles without regular access to practical studies on a profitable farm. Moreover, in these days when the agricultural industry is facing keen competition, parents are understandably interested in sending their sons to places where they can see how farming is made to pay.

The balance sheet

204. Assuming that capital expenditure is borne directly by the Ministry of Agriculture (paragraph 180 above), that the bulk of the agricultural students and some half of the dairy students come from Wales with fees determined as we have suggested (paragraph 184 above) and that running costs are of the order visualised (Appendix C) it will be apparent that the College would require a subvention of some £8,500 per annum:

<i>Income</i>		<i>£</i>	<i>Expenditure</i>		<i>£</i>
Fees 60 Welsh residents @ £50	}	5,000	Salaries		10,650
20 others @ £100			Maintenance		2,750
Subvention		8,500	Reserve		100
		<u>£13,500</u>			<u>£13,500</u>

205. If our proposals in paragraph 186 above were acceptable, the £8,500 subvention would be met by Welsh L.E.A.s. They would recover 60 per cent (or £5,100) from the Ministry of Agriculture, leaving some £3,400 net to be apportioned between the 17 authorities in Wales, or an average of £200 each. This assumes participation of the four County Boroughs in Wales and we hope that they would be associated with the venture. Nowadays there is increasing mutual interest and inter-dependence of town and country. The County Boroughs will not only stand to benefit from a sustained flow of Welsh diploma students (e.g., of N.D.D. holders into the processing and distributing sides of the milk industry); they can also help to stimulate recruitment of those suitable for the courses. On visiting Harper Adams College we were interested to learn that 60 per cent of the college's annual intake came from urban areas, and at Writtle only 20 per cent of the diploma students were farmers' sons.

Comparative cost of an alternative centre

206. During our enquiry we have only considered one alternative to the proposed Welsh Agricultural College, namely, the possibility of converting one of the Welsh farm institutes into a diploma centre. In Chapter III we described some of the difficulties inherent in assessing the cost of converting an institute, e.g., questions of policy affecting the future of one-year courses in the particular counties. As explained in this chapter, we have not been able to arrive at firm estimates for the new College. The cost of either alternative being so difficult to hazard, we cannot offer a detailed comparison between them.

207. A limited comparison can be gained by considering each of the major items of expenditure involved. Thus a rough balance could probably be struck between the saving at Aberystwyth on hostel accommodation and the saving at an institute on the provision of a farm. For the reasons stated in paragraph 158 above, we should expect requirements for teaching staff to be much the same at either centre.

208. Conversion or improvement of existing laboratories and lecture rooms at an institute would be less expensive than new buildings at Aberystwyth but the use of an institute for diploma courses would demand new or enlarged buildings for certificate students as well as heavy capital expense for the kind of apparatus and equipment found in U.C.W.'s dairy department at Aberystwyth. Administration expenses and overheads would tend to be lower at the institute because existing L.E.A. services could be used on an agency basis.

209. This brief survey does not suggest that it would be appreciably less costly to convert an institute than to establish the proposed College. Indeed our tentative figure of approximately £50,000 capital outlay for the 80-student College lies midway between the Carmarthenshire Authority's original estimate of approximately £30,000 to provide and equip a new dairy block for 40 N.D.D. students and the Monmouthshire Authority's estimate of nearly £70,000 to make permanent provision for 42 N.D.A. and N.D.D. students (paragraph 160 above).

210. Other factors enter into the reckoning of comparative cost. For example it is our considered view that only Aberystwyth can assure the maximum flow of students and offer a genuine prospect of successfully reviving the agriculture diploma course; and just as lack of students would mean loss of income, so an unsuccessful course could see capital works lying idle.

Conclusion

211. The White Paper on Technical Education (Cmd. 9703, February, 1956) contained an assurance that more students are being encouraged to come forward for agricultural education and that, as they do, facilities for their education will be increased. This has fortified us in developing our recommendations and we submit our proposal for a National Agricultural College of Wales in the belief that it is deserving of the public money required and will play a notable part in the development of Wales and its major industry.

Summary of conclusions and recommendations

212. We are glad to report that all our conclusions and recommendations are unanimous. They can be summarised as follows (recommendations in **bold type**):

General

- (i) Diploma teaching in Wales calls for a long-term solution and, without an agricultural college, must involve a departure from orthodox arrangements (paragraphs 16-17).
- (ii) The value and future of the diploma appear to be generally accepted (paragraph 23).
- (iii) The diploma course is normally for the "direct entrant" of a given educational standard and career intention (paragraph 33). In Wales it is often regarded as a "rung" in the ladder of agricultural education—and this has tended to obscure the functions, teaching standards and objectives of Welsh farm institutes (paragraphs 35-38).

Demand for courses

- (iv) The present incidence of vacancies at Welsh farm institutes does not reflect a decline in Welsh demand for agricultural education (paragraphs 41-42) and the contributory causes need not affect recruitment of diploma students (paragraphs 43-48).
- (v) Wales has an irresistible claim to priority for any new diploma centre that is established, irrespective of whether demand is viewed on an England-Wales basis, or is related solely to the Principality (paragraph 56).
- (vi) **A dairy diploma course should be established in Wales on a long-term footing for an annual intake of at least 20 students (paragraph 70).**
- (vii) **An agriculture diploma course should be established in Wales on an experimental basis for an annual intake of up to 20 students (paragraph 90); the syllabus should be conditioned by Welsh needs (paragraph 103); the course should lead to the N.D.A. examination (paragraph 104), and formal Welsh representation on the National Examination Boards would be an advantage (paragraph 105).**
- (viii) There is not yet any case for providing other specialist diploma courses in Wales (paragraph 107)—but any forestry diploma course introduced at a later stage should preferably be housed alongside the new agriculture course (paragraph 111).

Location of courses

- (ix) The University of Wales can no longer be expected to make direct provision for diploma courses (paragraph 123).
- (x) **The agriculture and dairy diploma courses should be provided at the same centre (paragraph 129). This precludes provision of single diploma courses at any Welsh farm institute (paragraph 130).**
- (xi) There are no strong grounds for disturbing the farm institute structure in Wales by converting one of the institutes into a diploma centre (para-

graph 164), but if this solution were adopted only Gelli Aur, Carmarthen-shire, would be sufficiently central in the Principality (paragraph 162).

- (xii) A National Agricultural College of Wales, affiliated to the University of Wales, and sponsored by the W.J.E.C., should be established at Aberystwyth (paragraph 167).
- (xiii) Any formula for affiliation would be a matter for the University, who could make a special contribution to the standards and syllabus of teaching, and by awarding a University diploma (paragraphs 172-173).
- (xiv) The College should be administered by a Governing Body of 15 persons, 6 each from the University and the W.J.E.C., and 3 nominated by the Minister of Agriculture (paragraph 176); day-to-day business should be entrusted to an Executive Committee of 5 Governors, in the same ratio of representation (paragraph 177).
- (xv) The submission of regular reports and arrangements for inspections of the College are matters best left to the M.A.F.F., the University and the W.J.E.C. (paragraph 178).
- (xvi) The Ministry of Agriculture should defray non-recurring expenditure for the College (paragraph 180), including the capital outlay of at least £50,000 (paragraph 198).
- (xvii) The College's recurring expenditure—of at least £13,500 per annum (paragraph 204)—should be met partly from fees (differentiated in favour of Welsh residents) and partly from a subvention contributed by Welsh L.E.A.s, apportioned by the W.J.E.C., and attracting 60 per cent grant-aid from the Ministry of Agriculture (paragraphs 184-186).
- (xviii) Prima facie there is no inexpensive alternative to the College (paragraph 209), and the expenditure involved is consistent with contemporary policy and provision for technical education (paragraph 211).

We are, sir,
Your obedient servants,

D. R. SEABORNE DAVIES (*Chairman*)
T. GLYN DAVIES
J. DONALDSON
W. CHARLES EVANS
OFFLEY WAKEMAN

J. B. Foxlee (*Secretary*)
October 1956

APPENDIX A

Evidence received

Evidence was given by the following organisations and persons

- *Caernarfonshire Education Committee* Councillor J. E. Roberts (Vice-Chairman, Agricultural Education Committee)
Alderman Mrs. A. Fisher
Councillor Reverend Robert Jones, B.A.
Councillor B. Owen Parry
Mr. Mansel Williams, M.A., B.Sc. (Director of Education)
Mr. W. D. Phillips, B.Sc. (Principal, Glynllifon Agricultural Institute)
Mr. Isaac Jones, N.D.A., N.D.D. (Former Principal, Madryn Farm Institute)
- Cardiganshire Education Committee*
- *Carmarthenshire Education Committee* Alderman D. Hughes, J.P. (Chairman)
Alderman J. M. Davies (Vice-Chairman)
Alderman J. Harries, B.B.M. (Chairman, Agricultural Education Committee)
Alderman T. Ll. Harries, J.P. (Vice-Chairman, Agricultural Education Committee)
Alderman T. J. Williams, J.P.
Mr. I. Howells, B.A., LL.B. (Director of Education)
Mr. J. L. Lloyd, M.Sc., A.R.I.C. (Principal, Gelli Aur Farm Institute)
- Council for Wales and Monmouthshire*
- *Country Landowners' Association* Lt.-Col. F. L. Dean (Council Member)
Lt.-Col. J. F. Williams Wynne, D.S.O., D.L. (Council and Executive Member)
Mr. G. W. Thomas (Secretary, Montgomeryshire and Merioneth County Branch)
- *County Councils' Association* Mr. W. J. Deacon, M.A.
Mr. W. B. Stevens
Mr. H. Martin Wilson, M.A.
Mr. R. R. Meyric Hughes (Deputy-Secretary)
- *Denbighshire Education Committee* Mr. E. Vaughan Jones (Vice-Chairman, Agricultural Education Committee)
Mr. I. C. M. Dodd, B.A. (Deputy-Director of Education)
Mr. D. S. Edwards, B.Sc. (Principal, Llysfas Farm Institute)
- Department of Agriculture for Scotland*
- †Essex Institute of Agriculture* Mr. B. H. Harvey, B.Sc., N.D.A., N.D.D. (Principal)
- Guild of Graduates (Agricultural Panel) University of Wales*

*Oral and written evidence

†Oral evidence only

- †*Harper Adams Agricultural College* Mr. C. G. W. Block (Bursar)
Mr. R. McD. Graham, B.Sc. (Senior Lecturer in Agriculture)
- Dr. T. Loveday, M.A.* Lately Chairman of the Standing Joint Advisory Committee on Agricultural Education
- **Milk Marketing Board* Dr. A. L. Provan, A.R.I.C. (Chief Chemist)
- **Ministry of Agriculture, Fisheries and Food* H.Q. LONDON
Professor H. G. Sanders, M.A., PH.D. (Chief Scientific Adviser, Agriculture, and lately Professor of Agriculture, Reading University)
Mr. A. B. Bartlett (Assistant Secretary, Education and Advisory Services Division)
Professor R. Rae, C.B., B.AGRIC. (Director, National Agricultural Advisory Service)
Mrs. J. J. Tsit (Principal, Education Branch)
Mr. G. T. Morgan, N.D.A., N.D.D. (Chief Milk Production Advisory Officer)
- H.Q. WALES
Mr. J. Morgan Jones, C.B.B. (Welsh Secretary)
Mr. E. Ll. Harry, O.B.E., M.Sc. (Director, National Agricultural Advisory Service, Wales)
- †*Ministry of Education* Sir Ben Bowen Thomas (Permanent Secretary of Welsh Department)
Mr. A. E. Marrington (Assistant Secretary, Welsh Department)
Dr. T. I. Davies (H.M. Inspector of Schools, Wales)
Dr. Matthew Williams (H.M. Inspector of Schools, Wales)
- **Monmouthshire Education Committee* Councillor H. G. Jones (Chairman, Agricultural Education Sub-Committee)
Alderman T. Bevan
Councillor G. Breakwell
Councillor H. G. Hesth
Mr. C. E. Gittens, M.A. (lately Director of Education)
Mr. Colin Jones, F.R.I.B.A. (County Architect)
Mr. L. T. Lowe, B.Sc., F.R.I.C., N.D.A. (Principal, Monmouthshire Institute of Agriculture)
Mr. H. Powell, M.B.E., F.I.M.T.A., A.S.A.A. (County Treasurer)
- Monmouthshire Federation of Trades and Labour Councils*
- **National Agricultural and Dairy Examination Boards* Mr. E. Capstick, M.C., M.Sc. (British Dairy Farmers' Association)
Mr. E. G. E. Griffith (Royal Agricultural Society of England)
Mr. Hunter Smith (Royal Agricultural Society of England)
Mr. R. M. Lemmon, B.L. (Secretary, Royal Highland and Agricultural Society of Scotland)
Mr. Alec Hobson, M.V.O., O.B.B. (Secretary, Royal Agricultural Society of England)
- **National Dairyman's Association (Inc.)* Mr. F. Proctor (Dairy Manager, Birmingham Co-operative Society)
- **National Farmers' Union* Mr. W. S. Jones, B.Sc., J.P. (Member, Welsh Committee)
Mr. E. M. Owens (Member, Development and Education Committee)
Mr. G. B. Redmayne (Member, Development and Education Committee)
Mr. H. C. Mason (Secretary, Development and Education Committee)
Mr. G. D. Stevenson (Lately Secretary, Development and Education Committee)

*Oral and written evidence

†Oral evidence only

* <i>National Federation of Young Farmers' Clubs, Wales</i>	Mr. S. Farrell Mr. D. Jones Mr. M. Jones Mr. J. Ll. Williams Mr. T. Napier Williams (County Organiser, Montgomeryshire)	} Representative team from Young Farmers' Clubs, Wales
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National Union of Agricultural Workers

Pembrokeshire Education Committee

* <i>Dr. R. Phillips, A.L.L.C.</i>	Liaison Officer to Minister of Agriculture, Fisheries and Food
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* <i>Royal Welsh Agricultural Society</i>	Mr. Moses Griffith, M.Sc. Mr. T. Lewis, B.Sc., M.S. Mr. J. A. George (Secretary)
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* <i>University College of Wales Aberystwyth</i>	Principal Goronwy Rees, M.A. Mr. T. Maelgwyn Davies, M.A. (Registrar) Professor W. Ellison, B.Sc., Ph.D. (Professor of Agriculture (Crop Husbandry)) Professor J. E. Nichols, M.Sc., Ph.D., F.R.S.E. (Professor of Agriculture (Animal Husbandry)) Mr. J. Lewis, M.Sc., N.D.A., N.D.D. (Director of College Dairy)
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University Grants Committee

* <i>University of Wales</i>	Principal Sir Emrys Evans, M.A., B.Litt. (Vice-Chancellor) Principal Goronwy Rees, M.A. (University College of Wales, Aberystwyth) Professor J. E. Nichols, M.Sc., Ph.D., F.R.S.E. (University College of Wales, Aberystwyth) Professor R. Alun Roberts, B.Sc., Ph.D. (University College of North Wales, Bangor)
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*† <i>Welsh Joint Education Committee</i>	Councillor D. Lewis, M.B.E., J.P. (Chairman, Agricultural Education Sub-Committee) Mr. H. Wyn Jones, M.A., B.Sc. (Secretary)
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*Oral and written evidence

†Also supplied a summary of L.E.A. opinion in Wales

APPENDIX B

Response to Agriculture Diploma Courses in Wales—Summary of Significant Data from Evidence

<i>Evidence from</i>	<i>Quantitative Estimates or Calculations</i>		<i>Other Data</i>
	<i>Basis</i>	<i>Expressed as annual intake</i>	
<i>Gaernarvonshire Education Committee</i>	—	—	(i) *Each year 1-2 students from the county are assisted to study for N.D.A. in England. (ii) *Three of the 17 students at Glynllifon Farm Institute reported to be of N.D.A. potential.
<i>Garmarthenshire Education Committee</i>	—	—	Seven of the 39 students at Gelli Aur Farm Institute reported to be of N.D.A. potential.
<i>County Councils' Association</i>	*Extremely rough yardsticks yielded by applying to Wales the ratio obtaining: (a) in England between N.D.A. students and agricultural population in the 18-21 age group; (b) in Shropshire between N.D.A. students and entire agricultural population.†	25	*Statistics of applications for M.A.F.F. scholarships suggest that Welsh candidates are more interested in degree and diploma courses than in farm institute courses.
		24	
<i>Denbighshire Education Committee</i>	—	—	Seven of the 37 students at Llysfael Farm Institute reported to be of N.D.A. potential.
<i>Harper Adams College</i>	—	—	*Fifteen Welsh applicants for the 1956 N.D.A. course: 4 accepted; only 3 others eligible.
<i>Monmouthshire Education Authority</i>	Enquiries (including one estimate) disclosed that 78 students had attended N.D.A. courses in England during the six years 1950-55.	13	(i) The Authority's enquiries revealed that the English centres had received 98 applications from Wales for the 1953-54 and 1954-55 sessions—27 students being accepted. Some applications may have been duplicated and some candidates may have been ineligible. (ii) Each year about 3 students

*Oral evidence

†The ratio for Shropshire may be high because Harper Adams College is situated in that county and also because the farms in Shropshire are, on the whole, fairly large. It has been suggested that, in order to make allowances for these facts, a more or less realistic estimate of Welsh annual intake based on the Shropshire ratio would be 15-20 places.

<i>Evidence from</i>	<i>Quantitative Estimates or Calculations</i>		<i>Other Data</i>
	<i>Basis</i>	<i>Expressed as annual intake</i>	
<i>National Farmers' Union</i>	By applying to Wales: (a) the ratio obtaining in England between the annual intake of students into N.D.A. courses and of people into the agricultural industry; (b) the ratio obtaining in England between farm institutes and diploma centres in the matter of (i) places provided (ii) annual intake of students; (c) the ratio obtaining in England between N.D.A. and N.D.D. students, and treating U.C.W.'s annual intake as the N.D.D. provision for Wales	47 62 43 60	from the county are assisted to study for N.D.A. in England and about 5 others are similarly assisted by adjacent Welsh L.E.A.s, including County Boroughs. (iii) Twelve of the 62 students at Usk Farm Institute reported to be of N.D.A. potential.
<i>National Examination Boards</i>	—	—	During the 5 years 1951-55, 33 Welsh residents took the N.D.A. examination.
<i>Royal Welsh Agricultural Society</i>	A questionnaire was addressed to English diploma centres to ascertain the average annual intake of Welsh N.D.A. students during 1951-54.	20	

APPENDIX C

Minimum Cost of an Affiliated College

CAPITAL COSTS

Buildings	£	£	£
Chemistry laboratory (25 students)			
*Biology laboratory (25 students)			
2 preparation rooms and stores			
Lecture room (80 students)		30,200	
5 staff or study rooms			
Administrative accommodation			
Library			
Students' common room			
Furniture and equipment			
Chemistry laboratory	1,300		
Biology laboratory	1,100		
Lecture room and administrative block	1,000		
Library and common room	750	4,150	34,350
Farm			
†200 acres including live and dead stock			16,000
<i>Minimum capital costs</i>			<u>50,350</u>

ANNUAL RUNNING EXPENSES

Staff			
Qualified teaching staff:			
Director		2,000	
Lecturer in Crop Husbandry	3 @ £1,000—		
Lecturer in Animal Husbandry	1 subject to be taken by		
Lecturer in Agricultural Science	Director	3,000	
Lecturer in Dairying			
Assistant Lecturer in Agricultural Science		500	
Lecturer in Farm Mechanization	half-time—share with		
Lecturer in Farm Management	Cardiganshire		
Lecturer in Veterinary Science	L.E.A., U.C.W., and	1,500	7,000
	Agricultural		
	Economics Department		
Technicians:			
5-6 technical assistants to cover Agricultural Science, Dairy,			
Bacteriology and Farm Mechanisation			2,000
Administrative Staff:			
Secretary/Bursar		850	
Clerk/Typist		450	
Shorthand Typist		350	1,650
Maintenance of laboratories, lecture rooms and offices			
Materials and replacements—bacteriology	600		
—botany and chemistry	1,000	1,600	
Office stationery, etc.		250	
Rates, insurance, heat, light, repairs, cleaning, etc.		900	2,750
<i>Minimum annual running expenses</i>			<u>13,400</u>

*Also to be used as lecture room

†In addition approximately £2,000 would be required for working capital

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